

4719

Thr	Ser	Asp	Thr	Lys	Ser	Asp	Thr	Ala	Thr	Gly	Gly	Glu	Ser	Ala	Gly	210	215	220	
His	Ala	Thr	Ser	Ser	Gln	Glu	Pro	Ser	Gly	Cys	Ser	Asp	Gln	Arg	Pro	225	230	235	240
Ala	Glu	Asp	Leu	Asn	Ile	Arg	Val	Glu	Arg	Leu	Thr	Lys	Lys	Leu	Glu	245	250	255	
Glu	Arg	Arg	Glu	Glu	Lys	Arg	Lys	Glu	Glu	Glu	Gln	Arg	Glu	Ile	Lys	260	265	270	
Lys	Glu	Ile	Glu	Arg	Arg	Lys	Thr	Gly	Lys	Glu	Met	Leu	Asp	Tyr	Lys	275	280	285	
Arg	Lys	Gln	Glu	Glu	Glu	Leu	Thr	Lys	Arg	Met	Leu	Glu	Glu	Arg	Asn	290	295	300	
Arg	Glu	Lys	Ala	Glu	Asp	Arg	Ala	Ala	Arg	Glu	Arg	Ile	Lys	Gln	Gln	305	310	315	320
Ile	Ala	Leu	Asp	Arg	Ala	Glu	Arg	Ala	Ala	Arg	Phe	Ala	Lys	Thr	Lys	325	330	335	
Glu	Glu	Val	Glu	Ala	Ala	Lys	Ala	Ala	Ala	Leu	Leu	Ala	Lys	Gln	Ala	340	345	350	
Glu	Met	Glu	Val	Lys	Arg	Glu	Ser	Tyr	Ala	Arg	Glu	Arg	Ser	Thr	Val	355	360	365	
Ala	Arg	Ile	Gln	Phe	Arg	Leu	Pro	Asp	Gly	Ser	Ser	Phe	Thr	Asn	Gln	370	375	380	
Phe	Pro	Ser	Asp	Ala	Pro	Leu	Glu	Glu	Ala	Arg	Gln	Phe	Ala	Ala	Gln	385	390	395	400
Thr	Val	Gly	Asn	Thr	Tyr	Gly	Asn	Phe	Ser	Leu	Ala	Thr	Met	Phe	Pro	405	410	415	
Arg	Arg	Glu	Phe	Thr	Lys	Glu	Asp	Tyr	Lys	Lys	Lys	Leu	Leu	Asp	Leu	420	425	430	
Glu	Leu	Ala	Pro	Ser	Ala	Ser	Val	Val	Leu	Leu	Pro	Ala	Gly	Arg	Pro	435	440	445	
Thr	Ala	Ser	Ile	Val	His	Ser	Ser	Ser	Gly	Asp	Ile	Trp	Thr	Leu	Leu	450	455	460	
Gly	Thr	Val	Leu	Tyr	Pro	Phe	Leu	Ala	Ile	Trp	Arg	Leu	Ile	Ser	Asn	465	470	475	480

## 4720

Phe Leu Phe Ser Asn Pro Pro Pro Thr Gln Thr Ser Val Arg Val Thr  
                             485                            490                            495

Ser Ser Glu Pro Pro Asn Pro Ala Ser Ser Ser Lys Ser Glu Lys Arg  
                             500                            505                            510

Glu Pro Val Arg Lys Arg Val Leu Glu Lys Arg Gly Asp Asp Phe Lys  
                             515                            520                            525

Lys Glu Gly Lys Ile Tyr Arg Leu Arg Thr Gln Asp Asp Gly Glu Asp  
                             530                            535                            540

Glu Asn Asn Thr Trp Asn Gly Asn Ser Thr Gln Gln Met  
                             545                            550                            555

<210> 5286

<211> 43

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5286

Asn Asp Gln Asn Pro Glu Ser Gln Trp Ser Asn Asn Lys His Thr Gln  
       1                            5                            10                            15

Ile Asp Cys Leu Ile Asn Ser Phe Xaa Leu Val Phe Lys Ser Asn Thr  
                             20                            25                            30

Phe Phe Lys Ser Pro Leu Xaa Lys Met Ile Ile  
                             35                            40

<210> 5287

<211> 143

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

4721

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5287

Thr	Gly	Trp	Xaa	Xaa	Cys	Pro	Xaa	Pro	Gly	Pro	Gly	Arg	Arg	Thr	Met
1				5					10					15	

Ser	Arg	Gln	Lys	Glu	Thr	Leu	Gln	Ser	Ala	Phe	Pro	Ser	Met	Cys	Ala
			20					25					30		

Leu	Cys	Pro	Ser	Glu	Pro	Ala	Asp	Xaa	Arg	Gly	Gly	Lys	Asp	Thr	Val
		35					40					45			

Leu	Asn	Glu	Gln	Asn	Leu	Gln	Asp	Thr	Gln	Ser	Cys	Leu	Phe	Ala	Thr
	50					55					60				

Trp	Pro	Tyr	Ala	Cys	Pro	Val	Phe	Ser	Leu	Lys	Ala	Phe	Thr	His	Ala
65					70					75					80

Arg	Ala	Val	Thr	Trp	Asn	Val	Leu	Ser	Ile	Thr	Pro	Ala	Val	Met	Pro
				85					90					95	

Ser	Thr	Glu	Leu	Asp	Gly	Arg	Pro	Leu	His	Gly	Ser	Leu	Lys	Arg	Ser
		100						105					110		

His	Pro	Ser	Asn	Trp	Val	Cys	His	Arg	His	Thr	Gly	Ser	Cys	Leu	Pro
		115						120				125			

Val	Leu	Pro	Val	Val	Ile	Val	Met	Arg	Ile	Val	Val	Leu	His	Pro
	130						135				140			

&lt;210&gt; 5288

&lt;211&gt; 48

&lt;212&gt; PRT

4722

&lt;213&gt; Homo sapiens

&lt;400&gt; 5288

Ser Gly Gln Glu Pro Gly Phe Gln Gln Arg Glu Leu Glu Asn Glu Pro  
 1 5 10 15  
 Arg Gly Ala Gly Ala Gly Gly Val Gly Glu Cys Gln Arg Ala Gly Met  
 20 25 30  
 Asn Trp Gln Val Ala Trp Arg Gly Gly Leu Val Pro Lys Pro Val Leu  
 35 40 45

&lt;210&gt; 5289

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5289

Pro Ala Ser Ala Thr Thr Arg Thr Gly Pro Arg Pro Gly Pro Ala Pro  
 1 5 10 15  
 Arg Cys Pro Leu Pro Ala Pro Gly His Ser Cys Thr Gln Ala Pro Pro  
 20 25 30  
 Arg Glu His Thr Ala Val His Thr Arg Glu Lys Gln Gln Leu Ala Ser  
 35 40 45  
 Leu Val Gly Thr Met Leu Ala Tyr Ser Leu Thr Tyr Arg Gln Glu Arg  
 50 55 60  
 Thr Pro Asp Gly Gln Tyr Ile Tyr Arg Leu Glu Pro Asn Val Glu Glu  
 65 70 75 80  
 Leu Cys Arg Phe Pro Glu Leu Pro Ala Arg Lys Pro Leu Thr Tyr Gln  
 85 90 95  
 Thr Lys Gln Leu Ile Ala Arg Glu Ile Glu Val Glu Lys Met Arg Arg  
 100 105 110  
 Ala Glu Ala Ser Ala Arg Val Glu Asn Ser Pro Gln Val Asp Gly Ser  
 115 120 125  
 Pro Pro Gly Leu Glu Gly Leu Leu Gly Gly Ile Gly Glu Lys Gly Val  
 130 135 140  
 His Arg Pro Ala Pro Arg Asn His Glu Gln Arg Leu Glu His Ile Met



## 4723

145                      150                      155                      160  
 Arg Arg Ala Ala Arg Glu Glu Gln Pro Glu Lys Asp Phe Phe Gly Arg  
                          165                      170                      175  
 Val Val Val Arg Ser Thr Ala Val Pro Ser Ala Gly Asp Thr Ala Pro  
                          180                      185                      190  
 Glu Gln Asp Ser Val Glu Arg Arg Met Gly Thr Ala Val Gly Arg Ser  
                          195                      200                      205  
 Glu Val Trp Phe Arg Phe Asn Glu Gly Val Ser Asn Ala Val Arg Arg  
                          210                      215                      220  
 Ser Leu Tyr Ile Arg Asp Leu Leu  
 225                      230

<210> 5290  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 5290  
 Ser Ile Thr Cys His Arg Glu Ser Glu Phe Leu Tyr Cys Leu Pro Ala  
   1                          5                          10                          15  
 Ala Arg Thr Lys Ser Glu Trp Trp Gly Pro Arg Ser Ser Gln Leu Gly  
                           20                          25                          30  
 Glu Lys Ala Leu Pro Asp Pro Gly Thr Arg Gly Leu Gly Gln Glu Ala  
                           35                          40                          45  
 Gly Arg Met Gly Gly Cys Asp His Arg His Thr His Thr Arg Ser Leu  
                           50                          55                          60  
 Ser Ser Gly Lys Gly Phe Pro Glu Ala Phe Ala His Thr Leu Asn Glu  
   65                          70                          75                          80  
 Val Phe Ser Cys Gln Ala Lys Pro Pro Glu Glu Lys  
                           85                          90

<210> 5291  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<220>

4724

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5291

Thr	Ile	Lys	Cys	Leu	Leu	Leu	Tyr	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
1				5				10						15		

Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
			20					25							30	

Lys	Lys	Lys	Lys	Gly	Xaa	Pro	Xaa
			35				40

&lt;210&gt; 5292

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5292

Val	Glu	Asn	Leu	Gln	Arg	Asn	Asp	Gly	Cys	Lys	Trp	Thr	Cys	Lys	Pro
1				5				10						15	

Lys	Leu	Gly	Ile	Gly	Glu	Val	Arg	Leu	Thr	Arg	Leu	Leu	Val	Arg	Val
			20					25					30		

Leu	Leu	Asn	Ser	Leu	Leu	Met	Arg	Arg	Cys	Leu	Asp	Lys	Tyr	Lys	Leu
			35					40					45		

Arg	Lys
	50

&lt;210&gt; 5293

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

## 4725

&lt;400&gt; 5293

Lys Pro Leu Ala Lys Xaa Arg Gly Ile Phe Phe Phe Ile Phe Lys Cys  
1 5 10 15

Leu Gly Thr Lys Pro Lys Ser Lys Arg Leu Thr Lys His Val Ser Leu  
20 25 30

Lys Ala Thr Cys Ile Leu Gln Tyr Asn Ile Lys Leu Phe Asn Leu Arg  
35 40 45

Asn Leu Val Leu Leu Ile Cys Thr Phe  
50 55

&lt;210&gt; 5294

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5294

Arg Thr Phe Met Lys Arg Trp Asn Cys Ser Tyr Lys Phe Phe Leu Leu  
1 5 10 15

Leu Leu Phe Leu Asn Met Pro Trp Asn Asn Ser Thr Ile Phe Ser Pro  
20 25 30

Ser Ile Asn Leu Ser Asn Lys Ala  
35 40

&lt;210&gt; 5295

&lt;211&gt; 49

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (37)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

4726

&lt;400&gt; 5295

Asn Cys Glu Asp Ile Leu Lys Leu Cys Leu Val Tyr Lys Tyr Lys Asp  
 1 5 10 15

Phe His Thr Asp Asn Tyr Gln Ile Pro Asn Thr Phe Thr Gly Lys Lys  
 20 25 30

Pro Ser Val Lys Xaa Leu Pro Gly Ser Ser Ser Leu Lys Phe Ser Xaa  
 35 40 45

Xaa

&lt;210&gt; 5296

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (77)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (79)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5296

Thr Thr Leu Xaa Arg Arg Ser Ser Leu Leu Asn Tyr Ile His Pro Asp  
 1 5 10 15

Cys Gly Asp Asn His Thr Pro Gln Phe Arg Xaa Tyr Tyr Tyr Tyr Gln

4727

20 25 30

Ser Val Gln Gly Leu Cys Trp Leu Ile Leu Phe Phe Tyr Pro Leu Tyr  
35 40 45

His Tyr Ser Pro Ile Ser Ser Xaa Thr Phe Ile Ser Lys Asn Leu Ile  
50 55 60

Val Trp His Leu Ser Leu Asp Met Glu Cys Phe Phe Xaa Lys Xaa  
65 70 75

<210> 5297  
<211> 59  
<212> PRT  
<213> Homo sapiens

<400> 5297

Met Phe Gly Leu Tyr Leu Val Leu Asp Pro Glu Leu Pro Phe Ser Lys  
1 5 10 15

Tyr Leu Asn Asp Tyr Tyr Tyr Phe Ile Ser Leu Phe Tyr Thr His Thr  
20 25 30

Arg Thr His Thr His Arg Glu Met Leu Phe Met Arg Phe Cys Ile Phe  
35 40 45

His Ile Leu His Ile Leu Tyr Met Ile Asp Glu  
50 55

<210> 5298  
<211> 183  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (107)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (111)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (123)

4728

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5298

Gln Gly Phe Glu Arg Gln Thr Thr Ala Ala Val Gly Val Leu Lys Ala  
 1 5 10 15

Val His Cys Gly Glu Trp Pro Asp Gln Pro Arg Leu Thr Lys Asp Val  
 20 25 30

Ile Cys Phe His Ala Glu Asp Phe Leu Glu Val Val Gln Arg Met Gln  
 35 40 45

Leu Asp Leu His Glu Pro Pro Leu Ser Gln Cys Val Gln Trp Val Asp  
 50 55 60

Asp Ala Lys Leu Asn Gln Leu Arg Arg Glu Gly Ile Arg Tyr Ala Arg  
 65 70 75 80

Ile Gln Leu Tyr Asp Asn Asp Ile Tyr Phe Ile Pro Arg Asn Val Val  
 85 90 95

His Gln Phe Lys Thr Val Ser Ala Val Cys Xaa Leu Ala Trp Xaa Ile  
 100 105 110

Arg Leu Lys Leu Tyr His Ser Glu Glu Asp Xaa Ser Gln Asn Thr Ala  
 115 120 125

Thr His Glu Thr Gly Thr Ser Ser Asp Ser Thr Ser Ser Val Leu Gly  
 130 135 140

Pro His Thr Asp Asn Met Ile Cys Ala Val Ser Lys Pro Pro Trp Ile  
 145 150 155 160

Leu Phe Phe Gln Ile Asn Phe Ile Leu Asn Met Asn Tyr Ser Arg Leu  
 165 170 175

Asn Met Asn Leu Leu His Leu  
 180

&lt;210&gt; 5299

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

4729

&lt;400&gt; 5299

Ile Ser His Phe Trp Glu Gln Thr Pro Ile Lys Val Pro Gly Asp Tyr  
 1 5 10 15

Leu Gln Trp Xaa Ala Glu Gln Lys Ile Ser Ala Val Leu Ile Ile Val  
 20 25 30

Val Thr Trp Val Thr Pro Pro Asn Thr Leu Cys Glu Leu Ser Glu Ile  
 35 40 45

Phe Gly Asn Phe Leu Met Tyr Ile Leu Glu Ile Leu Asn Val Gln Ile  
 50 55 60

Trp Ser Ser Ile  
 65

&lt;210&gt; 5300

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5300

Trp Gln Ser Val His Arg Ser Trp Leu Leu Ser Leu Leu Asn Leu Cys  
 1 5 10 15

Lys Arg Ser Leu Ser Asp Glu Gly Arg Ile Met Val Leu Leu Ala Leu  
 20 25 30

Ala Phe Pro Phe Cys Asp Leu Lys Ala Ser Ser Leu Arg Pro His Ser  
 35 40 45

Met Ala Pro Val Pro Tyr Ser His Ser Cys Leu Leu Lys Leu Pro Thr  
 50 55 60

Leu Leu Asn Cys Phe Trp Gly Glu Glu His Phe Phe Leu Lys Gln Asn  
 65 70 75 80

Arg Tyr Met Lys Gln Tyr Thr Gly Ile Asn Thr Asn Ile  
 85 90

&lt;210&gt; 5301

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

## 4730

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (57)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (65)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (71)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5301

Phe	Ser	Pro	Lys	Ala	Val	Leu	Leu	Arg	Leu	Cys	Phe	Thr	Ser	Ile	Tyr
1				5					10					15	

Lys	Leu	Tyr	Val	Lys	Cys	Cys	His	Lys	Glu	Val	Ser	Glu	Ala	Val	Gly
			20					25					30		

His	Thr	Gln	Gly	Arg	Ala	Glu	Lys	Tyr	Leu	Val	Val	Cys	Xaa	Xaa	Xaa
		35					40					45			

Lys	Pro	Trp	Met	Ala	Ala	Ala	Thr	Xaa	Pro	Ala	Tyr	Pro	Phe	Thr	Ala
	50					55					60				

Xaa	Val	Tyr	Ser	Leu	Arg	Xaa	Leu	Thr	Thr	Arg
65					70				75	

&lt;210&gt; 5302

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



## 4731

&lt;400&gt; 5302

Glu Leu Pro Ser Lys Arg Gln Ala Phe Val Ile Ser Met Glu Phe Glu  
 1 5 10 15

Gly Ser Trp Thr Ile Cys Lys Asp Ile Leu Thr Cys Ser Leu Arg Ser  
 20 25 30

Leu Ser Ser Ser Lys Arg Met Ala Arg Val Cys Gly Ile Ile Leu Ser  
 35 40 45

Thr Tyr Cys Cys Phe Phe Val Val Leu Leu Met Gln Val Ile Ile Tyr  
 50 55 60

Phe Leu Gly Val Ile Trp Arg Lys Ser Met Arg Gln Ala Cys Phe Ser  
 65 70 75 80

Pro Val

&lt;210&gt; 5303

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (220)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5303

Asp Cys Val Thr Glu Leu Ser Val His His Arg Asn Asn Arg Gln Thr  
 1 5 10 15

Met Glu Asp Leu Ile Ser Leu Trp Gln Tyr Asp His Leu Thr Ala Thr  
 20 25 30

Tyr Leu Leu Leu Leu Ala Lys Lys Ala Arg Gly Lys Pro Val Arg Leu  
 35 40 45

Arg Leu Ser Ser Phe Ser Cys Gly Gln Ala Ser Ala Thr Pro Phe Thr  
 50 55 60

Asp Ile Lys Ser Asn Asn Trp Ser Leu Glu Asp Val Thr Ala Ser Asp  
 65 70 75 80

Lys Asn Tyr Val Ala Gly Leu Ile Asp Tyr Asp Trp Cys Glu Asp Asp  
 85 90 95

Leu Ser Thr Gly Ala Ala Thr Pro Arg Thr Ser Gln Phe Thr Lys Tyr

4732

100	105	110
Trp Thr Glu Ser Asn Gly Val Glu Ser Lys Ser Leu Thr Pro Ala Leu		
115	120	125
Cys Arg Thr Pro Ala Asn Lys Leu Lys Asn Lys Glu Asn Val Tyr Thr		
130	135	140
Pro Lys Ser Ala Val Lys Asn Glu Glu Tyr Phe Met Phe Pro Glu Pro		
145	150	155
Lys Thr Pro Val Asn Lys Asn Gln His Lys Arg Glu Ile Leu Thr Thr		
165	170	175
Pro Asn Arg Tyr Thr Thr Pro Ser Lys Ala Arg Asn Gln Cys Leu Lys		
180	185	190
Glu Thr Pro Ile Lys Ile Pro Val Asn Ser Thr Gly Thr Asp Lys Leu		
195	200	205
Met Thr Gly Val Ile Ser Pro Glu Arg Arg Cys Xaa Gln Trp Asn Trp		
210	215	220
Ile Ser Thr Lys His Ile Trp Arg Arg Leu Gln Lys Glu Arg Glu Pro		
225	230	235
Lys Cys Leu Gly Ala Leu Lys Gly Gly Trp Ile Arg Leu Ser Leu Cys		
245	250	255
Ser Pro Gly Ala Lys Gly Arg Val Leu Pro Glu Thr Gly Pro Glu Asp		
260	265	270

&lt;210&gt; 5304

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5304

Phe	Leu	Gly	Ala	Pro	Ser	Ile	Cys	Ala	Gly	Asp	Glu	Glu	Gly	Thr	Glu
1				5					10					15	
Ile	Asp	Thr	Leu	Gln	Phe	Arg	Leu	Gln	Val	Arg	Cys	Thr	Arg	Glu	Pro
	20							25					30		
Pro	Cys	Cys													
		35													

4733

&lt;210&gt; 5305

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5305

Asp	Phe	Leu	Lys	Gly	Ser	Lys	Ala	Phe	Ala	Cys	Tyr	Leu	Cys	Phe	Phe
1				5					10					15	

Ser	Pro	Lys	Pro	Lys	Gln	Lys	Ile	Met	Pro	Leu	Cys	Gln	Thr	Phe	Leu
			20					25					30		

Leu	Gly	Thr	Ser	Thr	Xaa	Ser	Gln	Leu	Xaa	Lys	Tyr	Asn	Val	Tyr	Ile
		35					40					45			

Ala	Gln	Phe	Tyr	Asn	Leu	Ser	Met	Ala	Gln	Ile	Leu	Glu	Thr	Tyr	Lys
	50					55					60				

Leu	Asp	Asp	His	Arg	Asp	Ile	Val	Val	Asn	Ile	Trp	Ala	Trp	Asn	Gln
65					70					75					80

Arg	Thr	Leu	Gly	Ser	Asn	Leu	Ser	Phe	Lys	Ser	Lys	Lys	Leu	Asn	Ser
				85					90					95	

Leu Ala Glu

&lt;210&gt; 5306

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

4734

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (53)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5306

Arg Phe Asn Phe Pro Ala Ser Pro Glu Ala Arg Tyr Gly His Asn Thr  
 1 5 10 15

Lys Phe Cys Pro Arg Arg Leu Ser Lys Ile Val Trp Asp Phe Gln Glu  
 20 25 30

Met Phe Leu Lys Ser Xaa Ala Gly Leu Ser Ser Cys Leu Leu Pro Leu  
 35 40 45

Cys Trp Leu Glu Xaa Lys Asp His Gly Arg Arg Pro Ser Ser His Pro  
 50 55 60

Gly Arg  
 65

&lt;210&gt; 5307

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (18)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5307

Val Leu Tyr His Cys Ala Ser Arg Tyr Arg Arg Arg Ala Arg Gln Thr  
 1 5 10 15

Cys Xaa Pro Ser Tyr Thr Arg Ser Ala Asp Leu Pro Ser Arg Thr Pro  
 20 25 30

Pro Val Glu Asp Leu Leu Glu Leu Ser Arg Ala Phe Trp Val Gly Ala  
 35 40 45

Asp Gly Gly Gly Arg Val Arg Val Leu Gly Gly Thr Glu Ala His Glu  
 50 55 60

Asp Gly Ile Pro Pro Glu Ser Met Asp His Tyr Ala Asp Gly His Arg  
 65 70 75 80

Pro Gln His Cys His Leu Gly Tyr Arg Cys His Gly Arg Pro Gln Arg

4735

	85		90		95
Glu Gly Leu Pro Arg Cys Leu Lys Val Pro Pro Val Asn Leu Ser Ser	100	105	110		
Val Ser Val Pro Phe Pro Val Thr His Arg Ala Gly Met Glu Phe Asn	115	120	125		
Gly Cys Ser Gly Gln Thr Leu Val His Gly Gln Thr Ser Leu Leu Trp	130	135	140		
Ile Leu Gln Asp	145				

&lt;210&gt; 5308

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5308

Met Lys Ile Phe Lys Leu Glu Leu Glu Glu Gly Val Val Glu Glu Gln	1	5	10	15
Gly Val Leu Leu His Pro Glu Val Val Gly Leu Leu Leu Pro Ala Val	20	25	30	
Glu Pro Val Ile His Arg Glu Glu Val Leu Asp Gln Gln Glu Ala Phe	35	40	45	
Glu Val Arg Glu Glu Val Pro Asn Asn Lys Glu Ala Ala Gly Arg Glu	50	55	60	
Lys Gly Ser Arg Pro Val Leu Thr Cys Tyr Asn Glu Asp	65	70	75	

&lt;210&gt; 5309

&lt;211&gt; 704

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

## 4736

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5309

Xaa Gly Xaa Lys Gly Arg Glu Gly Lys Gly Gly Ser Arg Gly Gly Ala  
 1 5 10 15  
 Arg Ala His Arg Glu Arg Ala Arg Arg Arg Val Glu Leu Asp Arg Val  
 20 25 30  
 Cys Cys Gln Arg Arg Glu Leu Arg Pro Pro Phe Tyr Asn Ser Ser Thr  
 35 40 45  
 Arg Ala Gly His Arg Glu Gln Arg Ala Arg Val Ser Arg Asn Pro Ile  
 50 55 60  
 Pro Ser Asp Arg Ile Ser Pro Pro Gln Pro Asn Gly Glu Ile Ser Gly  
 65 70 75 80  
 Asn Met Ala Thr Glu His Val Asn Gly Asn Gly Thr Glu Glu Pro Met  
 85 90 95  
 Asp Thr Thr Ser Ala Val Ile His Ser Glu Asn Phe Gln Thr Leu Leu  
 100 105 110  
 Asp Ala Gly Leu Pro Gln Lys Val Ala Glu Lys Leu Asp Glu Ile Tyr  
 115 120 125  
 Val Ala Gly Leu Val Ala His Ser Asp Leu Asp Glu Arg Ala Ile Glu  
 130 135 140  
 Ala Leu Lys Glu Phe Asn Glu Asp Gly Ala Leu Ala Val Leu Gln Gln  
 145 150 155 160  
 Phe Lys Asp Ser Asp Leu Ser His Val Gln Asn Lys Ser Ala Phe Leu  
 165 170 175  
 Cys Gly Val Met Lys Thr Tyr Arg Gln Arg Glu Lys Gln Gly Thr Lys  
 180 185 190  
 Val Ala Asp Ser Ser Lys Gly Pro Asp Glu Ala Lys Ile Lys Ala Leu  
 195 200 205  
 Leu Glu Arg Thr Gly Tyr Thr Leu Asp Val Thr Thr Gly Gln Arg Lys  
 210 215 220  
 Tyr Gly Gly Pro Pro Pro Asp Ser Val Tyr Ser Gly Gln Gln Pro Ser  
 225 230 235 240  
 Val Gly Thr Glu Ile Phe Val Gly Lys Ile Pro Arg Asp Leu Phe Glu  
 245 250 255

## 4737

Asp	Glu	Leu	Val	Pro	Leu	Phe	Glu	Lys	Ala	Gly	Pro	Ile	Trp	Asp	Leu	260	265	270
Arg	Leu	Met	Met	Asp	Pro	Leu	Thr	Gly	Leu	Asn	Arg	Gly	Tyr	Ala	Phe	275	280	285
Val	Thr	Phe	Cys	Thr	Lys	Glu	Ala	Ala	Gln	Glu	Ala	Val	Lys	Leu	Tyr	290	295	300
Asn	Asn	His	Glu	Ile	Arg	Ser	Gly	Lys	His	Ile	Gly	Val	Cys	Ile	Ser	305	310	315
Val	Ala	Asn	Asn	Arg	Leu	Phe	Val	Gly	Ser	Ile	Pro	Lys	Ser	Lys	Thr	325	330	335
Lys	Glu	Gln	Ile	Leu	Glu	Glu	Phe	Ser	Lys	Val	Thr	Glu	Gly	Leu	Thr	340	345	350
Asp	Val	Ile	Leu	Tyr	His	Gln	Pro	Asp	Asp	Lys	Lys	Lys	Asn	Arg	Gly	355	360	365
Phe	Cys	Phe	Leu	Glu	Tyr	Glu	Asp	His	Lys	Thr	Ala	Ala	Gln	Ala	Arg	370	375	380
Arg	Arg	Leu	Met	Ser	Gly	Lys	Val	Lys	Val	Trp	Gly	Asn	Val	Gly	Thr	385	390	395
Val	Glu	Trp	Ala	Asp	Pro	Ile	Glu	Asp	Pro	Asp	Pro	Glu	Val	Met	Ala	405	410	415
Lys	Val	Lys	Val	Leu	Phe	Val	Arg	Asn	Leu	Ala	Asn	Thr	Val	Thr	Glu	420	425	430
Glu	Ile	Leu	Glu	Lys	Ala	Phe	Ser	Gln	Phe	Gly	Lys	Leu	Glu	Arg	Val	435	440	445
Lys	Lys	Leu	Lys	Asp	Tyr	Ala	Phe	Ile	His	Phe	Asp	Glu	Arg	Asp	Gly	450	455	460
Ala	Val	Lys	Ala	Met	Glu	Glu	Met	Asn	Gly	Lys	Asp	Leu	Glu	Gly	Glu	465	470	475
Asn	Ile	Glu	Ile	Val	Phe	Ala	Lys	Pro	Pro	Asp	Gln	Lys	Arg	Lys	Glu	485	490	495
Arg	Lys	Ala	Gln	Arg	Gln	Ala	Ala	Lys	Asn	Gln	Met	Tyr	Asp	Asp	Tyr	500	505	510
Tyr	Tyr	Tyr	Gly	Pro	Pro	His	Met	Pro	Pro	Pro	Thr	Arg	Gly	Arg	Gly	515	520	525

4738

Arg Gly Gly Arg Gly Gly Tyr Gly Tyr Pro Pro Asp Tyr Tyr Gly Tyr  
 530 535 540  
 Glu Asp Tyr Tyr Asp Tyr Tyr Gly Tyr Asp Tyr His Asn Tyr Arg Gly  
 545 550 555 560  
 Gly Tyr Glu Asp Pro Tyr Tyr Gly Tyr Glu Asp Phe Gln Val Gly Ala  
 565 570 575  
 Arg Gly Arg Gly Gly Arg Gly Ala Arg Gly Ala Ala Pro Ser Arg Gly  
 580 585 590  
 Arg Gly Ala Ala Pro Pro Arg Gly Arg Ala Gly Tyr Ser Gln Arg Gly  
 595 600 605  
 Gly Pro Gly Ser Ala Arg Gly Val Arg Gly Ala Arg Gly Gly Ala Gln  
 610 615 620  
 Gln Gln Arg Gly Arg Gly Val Arg Gly Ala Arg Gly Gly Arg Gly Gly  
 625 630 635 640  
 Asn Val Gly Gly Lys Arg Lys Ala Asp Gly Tyr Asn Gln Pro Asp Ser  
 645 650 655  
 Lys Arg Arg Gln Thr Asn Asn Gln Asn Trp Gly Ser Gln Pro Ile Ala  
 660 665 670  
 Gln Gln Pro Leu Gln Gly Gly Asp His Ser Gly Asn Tyr Gly Tyr Lys  
 675 680 685  
 Ser Glu Asn Gln Glu Phe Tyr Gln Asp Thr Phe Gly Gln Gln Trp Lys  
 690 695 700

&lt;210&gt; 5310

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE



4739

&lt;222&gt; (23)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5310

Asp Tyr Ala Leu Ser Asn Thr Thr Xaa Tyr Arg Glu Lys Leu Val Arg  
1 5 10 15

Leu Gln Val Pro Val Arg Xaa Phe Pro Gly Arg Pro Thr Arg Pro Trp  
20 25 30

Glu Thr Glu Gln Asp Ser Val Ser Lys Lys Asn Lys Asn Lys Asn Lys  
35 40 45

Lys Thr Glu Gly Gln Ala Gln Val Lys Tyr Pro Ile Phe Ile Leu Ser  
50 55 60

Arg Gly Ile Lys Lys  
65

&lt;210&gt; 5311

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5311

Cys Ser Asn Cys Pro Lys Leu Trp Pro Lys Lys Ala Pro Ser Asn Trp  
1 5 10 15

Leu Leu Cys Pro Phe Asp Met Ala His His Ser Leu Asn Thr Phe Tyr  
20 25 30

Ile Trp His Asn Asn Val Leu His Thr His Leu Val Phe Phe Leu Pro  
35 40 45

His Leu Leu Asn Gln Pro Phe Ser Arg Gly Ser Phe Leu Ile Trp Leu  
50 55 60

Leu Leu Cys Trp Asn Ser Trp Tyr His Leu Arg Thr Leu Arg Arg Gln  
65 70 75 80

Ala Asn Gln Ala Asn Lys Leu Ser Met Met Leu Leu Arg Val Lys Gln  
85 90 95

Ser Pro Gly Thr Lys Leu Cys His Gly Asp Ser Glu Leu Thr Ser Gly  
100 105 110

Leu Leu Ala Thr  
115

4740

<210> 5312  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (28)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (81)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (89)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5312  
 Val Thr Ile Ile Ile Ser Ala Ser Pro Thr Gln Val Thr Leu Leu Gly  
   1                  5                  10                  15  
 Ser Pro Val Cys Pro His Leu Glu Val Thr Ala Xaa Pro Trp Arg Trp  
                   20                  25                  30  
 Asp Ser Ile Leu Ser Pro Gly Cys Leu Pro Pro Val Arg Arg Pro Val  
           35                  40                  45  
 Ser Trp Cys Val Thr Ser Gly Arg Cys Gln Ala Cys Phe Pro Pro Ser  
   50                  55                  60  
 Phe Pro Pro Gln Arg Ala Arg Thr Asn His Gln Cys His His Thr Ser  
   65                  70                  75                  80  
 Xaa Trp Pro Glu Asn Phe Met Asp Xaa Phe Thr Cys Ala Ile Val Asn  
                   85                  90                  95  
 Leu Arg Arg Pro  
           100

<210> 5313  
 <211> 63  
 <212> PRT  
 <213> Homo sapiens

## 4741

&lt;400&gt; 5313

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Val Pro Gly Glu Ala Glu Leu Glu Arg Ala Val Glu Ala Phe Pro Leu
 1              5              10              15

Leu Val Glu Ser Tyr Ala Pro His Ser Gly Ser Glu Leu Gln Leu Leu
              20              25              30

Ser Arg Thr Thr Thr Glu Ser Gly Ile Arg Val Lys Asn Thr Ser Pro
          35              40              45

Thr Pro Pro Leu Leu His Pro Arg Arg Phe His Val Phe Asn Leu
 50              55              60

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&lt;210&gt; 5314

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5314

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Asp Ser Gly Ser Cys Gly Pro Asp Pro Lys Cys Gly Asp Leu Arg Arg
 1              5              10              15

Ile Lys Gly Leu Cys Lys Phe Ala Asn Met Phe Thr Leu Ser Gln Thr
          20              25              30

Ser Arg Ala Trp Phe Ile Asp Arg Ala Arg Gln Ala Arg Glu Glu Arg
          35              40              45

Leu Val Gln Lys Glu Arg Glu Arg Ala Ala Val Val Ile Gln Ala His
          50              55              60

Val Arg Ser Phe Leu Cys Arg Ser Arg Leu Gln Arg Asp Ile Arg Arg
        65              70              75              80

Glu Ile Asp Asp Phe Phe Lys Ala Asp Asp Pro Glu Ser Thr Lys Arg
          85              90              95

Ser Ala Leu Cys Ile Phe Lys Ile Ala Arg Lys Leu Leu Phe Leu Phe
          100              105              110

Arg Ile Lys Glu Asp Asn Glu Arg Phe Glu Lys Leu Cys Arg Ser Ile
          115              120              125

Leu Ser Ser Met Asp Ala Glu Asn Glu Pro Lys Val Trp Tyr Val Ser
          130              135              140

Leu Ala Cys Ser Lys Asp Leu Thr Leu Leu Trp Ile Gln Gln Ile Lys
          145              150              155              160

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Asn	Ile	Leu	Trp	Tyr	Cys	Cys	Asp	Phe	Leu	Lys	Gln	Leu	Lys	Pro	Glu	
				165					170					175		
Ile	Leu	Gln	Asp	Ser	Arg	Leu	Ile	Thr	Leu	Tyr	Leu	Thr	Met	Leu	Val	
			180					185					190			
Thr	Phe	Thr	Asp	Thr	Ser	Thr	Trp	Lys	Ile	Leu	Arg	Gly	Lys	Gly	Glu	
		195					200					205				
Ser	Leu	Arg	Pro	Ala	Met	Asn	His	Ile	Cys	Ala	Asn	Ile	Met	Gly	His	
	210					215					220					
Leu	Asn	Gln	His	Gly	Phe	Tyr	Ser	Val	Leu	Gln	Cys	Cys	Asp	Gly	Leu	
225					230					235					240	
Phe	Pro	Asp	Leu	Val	Ser	Tyr	Ala	Pro	His	Asn	Asn	Pro	Val	Arg	Trp	
				245					250					255		
Ser	Val	Gly	Arg	Ser	Trp	Tyr	Asp	Trp	Gln	Leu	Ser	Arg				
				260				265								

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<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids
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BNSDOCID: <WO\_\_0122920A2\_1 >

## 4743

Ser Thr Arg Lys Gly Ser Thr Trp Phe Tyr Glu Gly Ile Leu Gly Gly  
 65 70 75 80

Ala Thr Pro His Leu Pro Pro Thr Tyr Thr Phe Cys Cys Xaa Lys Cys  
 85 90 95

Leu Ile Pro His Asp Val Ser Leu Ser Phe Gln Gln Lys Lys Val Lys  
 100 105 110

Leu Trp Val Val Glu Pro  
 115

<210> 5316

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (50)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5316

Ala Glu Arg Ser Leu Lys Ile Leu Pro Leu Leu Lys Lys Leu Leu Lys  
 1 5 10 15

Ser Asn Asp His Glu Cys Met Leu Gly His Leu Cys Met Tyr Ile Gln  
 20 25 30

Ile Asp Arg Met Asp Phe Xaa Lys Asn Gly Ile Thr Ile Val Leu Gln  
 35 40 45

Trp Xaa Lys Lys Tyr Gly Ile Leu Pro His Ser Leu Asn Leu Gly Gly  
 50 55 60

Ile Gln Lys Ala Leu Leu Lys Pro Ser Asn Lys Leu Asp Gln Leu Ser  
 65 70 75 80

Leu Asp Leu

<210> 5317

4744

<211> 77  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (8)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (17)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (20)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (47)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5317  
 Leu Leu Arg Arg Gly Phe Ile Xaa Gly Phe Tyr Asn Ala Asn Val Val  
 1 5 10 15

Xaa Leu Arg Xaa Lys Asn Trp Gln Leu Glu Ser Leu Ser Leu Ile Ser  
 20 25 30

Lys Gly Asn Pro Asp Phe Phe Val Asn Tyr Val Arg Gln Val Xaa Tyr  
 35 40 45

Gly Phe Leu Tyr Glu Leu Gln Phe Thr Val His Gln Ile Leu Val Ser  
 50 55 60

Glu Glu Leu Ile Tyr Val Lys Cys Leu Lys Ile Tyr Thr  
 65 70 75

<210> 5318  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (41)  
 <223> Xaa equals any of the naturally occurring L-amino acids

4745

&lt;400&gt; 5318

Ser Pro Gly Gly Arg Ser Ser Leu Leu Leu Ser Pro Val Val Ser Arg  
 1 5 10 15

Thr Ser Cys Pro Asp Leu Pro Trp Ser Cys Leu Ser Asp Ser Leu His  
 20 25 30

Gln Gly His Pro Thr Ala Ser Lys Xaa Ala Phe Pro Trp Thr Asn Ala  
 35 40 45

Thr Ala Thr Phe Met Cys Glu Ala Lys Ile Thr Leu Gln Gln Ser Gln  
 50 55 60

Tyr  
 65

&lt;210&gt; 5319

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (131)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (132)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5319

Pro Ala Gly Glu Ser Ser Pro Ala Pro Trp Leu Lys Gly Pro Gly Ala  
 1 5 10 15

His Leu Pro Glu Ala Arg Cys Gly Gly Gly Pro Arg Gly Arg Ser Gln  
 20 25 30

Ala Gln Ser Pro Gln Ser Ser Gly Pro Val Gly Gly Arg Gly Arg Ser  
 35 40 45

Gly Ser Lys Ala Arg Thr Pro Gln Leu Phe Arg Leu Gln Gln Gln Leu  
 50 55 60

Gln Arg Phe Gly His Gly Cys Glu Val Pro Arg Cys Trp Leu Gln Ala  
 65 70 75 80

Ala Arg Glu His Pro Gly Gln Gly Gln Glu Ala Gln Ser Glu Glu Glu

85

90

95

Lys Gly Pro Gly Gln Gly Ser Leu Asn Leu Pro Leu Cys Leu Gln Lys  
115 120 125

Lys Lys Xaa Xaa  
130

<210> 5320

<211> 48

<212> PRT

<213> Homo sapiens

<400> 5320

Leu Ser Ser Ile Cys Leu Asn Ile Ser Ser Leu Gly Asp Ser Ser Pro  
1 5 10 15

Leu Cys Leu Val Ala Asn Cys Asn Ser Pro Cys Gly Pro Thr Glu Tyr  
20 25 30

His Ser Thr Ala Phe Leu Asp Ile Tyr Asp Val Leu Thr Ile Gln Val  
35 40 45

$\langle 210 \rangle$  5321

<211> 63

<212> PRT

<213> Homo sapiens

<400> 5321

Lys Glu Trp His Cys Phe Tyr Ile Phe Ala His Leu Phe His Ala Arg  
1 5 10 15

Leu Asn Arg Asn Ser Tyr Leu Leu Val Arg Val Val Cys Cys Asn Ile  
20 25 30

Thr Tyr His Val Thr Ser Gly Lys Pro His Cys Met His Val Arg Glu  
35 40 45

Gly Glu Ser His Val Arg Val Val Ile Lys Ile Val Leu Thr Leu  
50 55 60



4747

<210> 5322  
 <211> 87  
 <212> PRT  
 <213> Homo sapiens

<400> 5322  
 Met Arg Arg Arg Val Phe Phe Leu His Arg Cys Ser Ile Leu Val Phe  
 1 5 10 15  
 Leu Phe Pro Cys Lys Cys Asn Gln Met Pro Phe Tyr Met Trp Thr Tyr  
 20 25 30  
 Leu Tyr Trp Pro Asn Ile Phe Phe Leu Leu Ser Leu Phe Phe Phe Pro  
 35 40 45  
 Phe Phe Leu Leu Pro Leu Phe Leu Tyr Ser Phe Leu Phe Leu Phe Phe  
 50 55 60  
 Phe Phe Phe Ser Phe Phe Phe Gly Ser Cys Cys Tyr Pro Arg His Phe  
 65 70 75 80  
 Thr Ser Pro Ser Leu Lys Gly  
 85

<210> 5323  
 <211> 79  
 <212> PRT  
 <213> Homo sapiens

<400> 5323  
 Ile Gly Leu Lys Ala Asn Ser Gln Gly Ala Thr Asp Pro Phe His Asn  
 1 5 10 15  
 Arg Met Leu Pro Val Asn Ser Leu Ser Ile Leu Leu Cys Pro Val Ser  
 20 25 30  
 Lys Lys Lys Lys Lys Ser Arg Arg Val Ser Gln Ser Gly His Leu Ile  
 35 40 45  
 Arg Asp Leu Ala Gln Glu Glu Glu Met Gly Arg Glu Ser Asp Gly Glu  
 50 55 60  
 Gln His Ser Pro Trp Glu Pro Glu Val Gly Gly His Arg Ala Pro  
 65 70 75

4748

<210> 5324  
 <211> 98  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (10)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5324  
 Glu Pro Ala Ala Thr Ala Ala Glu Thr Xaa Ser Cys Val Leu Cys Gly  
   1                  5                  10                  15  
 Leu Pro Ala Ala Gly Lys Ser Thr Phe Ala Arg Ala Leu Ala His Arg  
                   20                  25                  30  
 Leu Gln Gln Glu Gln Gly Trp Ala Ile Gly Val Val Ala Tyr Asp Asp  
           35                  40                  45  
 Val Met Pro Asp Ala Phe Leu Ala Gly Ala Arg Ala Arg Pro Ala His  
   50                  55                  60  
 Ser Gln Trp Lys Leu Leu Arg Gln Glu Leu Leu Lys Tyr Leu Glu Tyr  
   65                  70                  75                  80  
 Phe Leu Met Ala Val Ile Asn Gly Cys Gln Met Ser Val Pro Pro Asn  
                   85                  90                  95  
 Arg Thr

<210> 5325  
 <211> 178  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (4)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (5)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE

4749

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (12)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (166)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5325

Gly	Lys	Gly	Xaa	Xaa	Leu	Pro	Ile	Xaa	Xaa	Ser	Xaa	Thr	Phe	Met	Pro
1				5					10					15	

Asn	Gly	Cys	Cys	Lys	Thr	Cys	Thr	Pro	Arg	Asn	Glu	Thr	Arg	Val	Pro
			20					25					30		

Cys	Ser	Thr	Val	Pro	Val	Thr	Thr	Glu	Val	Ser	Tyr	Ala	Gly	Cys	Thr
		35					40					45			

Lys	Thr	Val	Leu	Met	Asn	His	Cys	Ser	Gly	Ser	Cys	Gly	Thr	Phe	Val
	50					55					60				

Met	Tyr	Ser	Ala	Lys	Ala	Gln	Ala	Leu	Asp	His	Ser	Cys	Ser	Cys	Cys
65					70					75					80

Lys	Glu	Glu	Lys	Thr	Ser	Gln	Arg	Glu	Val	Val	Leu	Ser	Cys	Pro	Asn
				85					90					95	

Gly	Gly	Ser	Leu	Thr	His	Thr	Tyr	Thr	His	Ile	Glu	Ser	Cys	Gln	Cys
			100					105					110		

Gln	Asp	Thr	Val	Cys	Gly	Leu	Pro	Thr	Gly	Thr	Ser	Arg	Arg	Ala	Arg
		115					120					125			

Arg	Ser	Pro	Arg	His	Leu	Gly	Ser	Val	Ser	Gly	Val	Gly	Thr	Ala	Pro
	130					135					140				

Ser	Leu	Pro	Ser	Thr	Ala	Leu	Pro	Pro	Pro	Asp	Pro	Leu	Ser	Leu	Leu
145					150					155					160

Lys	Leu	Gly	Phe	Leu	Xaa	Ser	Asp	Ile	Tyr	Cys	Leu	Ser	Phe	Cys	Ser
				165					170					175	

4750

Val Leu

&lt;210&gt; 5326

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5326

Arg	Gly	Gly	Gln	Thr	Xaa	Xaa	Pro	Ala	Gly	Ala	Arg	Xaa	Gly	Thr	Val
1				5					10					15	

Leu	Asn	Pro	Gly	Glu	Thr	Ala	Lys	Trp	Lys	Thr	Tyr	Arg	Val	Cys	Ala
			20					25						30	

Leu	Pro	Asp	Phe	Thr	Val	Leu	Leu	Gly	His	Phe	Thr	Tyr	Val	Pro	Ala
		35						40					45		

Val	Ile	Asn
		50

&lt;210&gt; 5327

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5327

Pro	Gln	Leu	Tyr	Lys	Leu	Phe	Phe	Lys	Thr	Lys	Tyr	Phe	Gln	Val	Tyr
1				5					10					15	

Leu	Leu	Thr	Lys	Asn	Ile	Ile	Met	Val	Lys	Thr	Phe	Leu	Phe	Asn	Arg
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 4751

20                      25                      30  
 Leu Val Ile Phe Leu Thr Ser Ile Phe Phe Asn Leu Ser Leu His Lys  
                     35                      40                      45  
 Lys Asn  
                     50

&lt;210&gt; 5328

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (93)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5328

Ser Val Tyr Leu Lys Arg Asn Leu Ile Phe Gln Gly Ser Asn Val Tyr  
   1                      5                      10                      15

Val Phe Gln Val Val Leu Pro Thr Phe Ile Leu Glu Arg Arg Ser Leu  
                     20                      25                      30

Leu Glu Met Tyr Ala Asp Phe Phe Xaa His Pro Asp Leu Phe Val Arg  
                     35                      40                      45

Tyr Leu Thr Glu His Gly Ser Phe Gln Arg Leu Gln Met Leu Leu Ser  
                     50                      55                      60

Ser Phe Leu Pro Phe Ile Leu Gln Asp Arg Trp Ile Pro Cys His Leu  
   65                      70                      75                      80

Ser Asn Ile Ser Gly Tyr Ser Val Val Leu Asn Asn Xaa Phe Thr Leu  
                     85                      90                      95

Val Ala Cys Leu Leu Lys Val Ile Trp Gly Arg Cys  
                     100                      105

&lt;210&gt; 5329

&lt;211&gt; 67

4752

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (67)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5329

Leu Cys Met Ser Leu Gly Glu Cys Val Ser Ser Thr Val Ala Pro Arg  
 1 5 10 15

Gly Ser Thr His Ser Leu Lys Leu Leu Leu Pro His Cys Thr Tyr Ser  
 20 25 30

Leu Arg Leu Asn Trp Ser Gln Thr Asn Trp Asp Pro Ala Gln Ser Ser  
 35 40 45

Ser Ser Gln Asn Glu Val Leu Arg Pro Gln Cys Val Arg Thr Cys Leu  
 50 55 60

Ala Val Xaa  
 65

&lt;210&gt; 5330

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (51)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5330

Ala Gln Phe Leu Gly His Ala Pro Val Cys Ser Asp Met Leu Leu Tyr  
 1 5 10 15

Val Thr Glu Met Ala Met Ser Thr Gly Gly Lys Ile Thr Pro Thr Trp  
 20 25 30

Glu Glu Glu Lys Pro Val Arg Gly Ser Thr Ala Gly Ala Ala Leu Ser  
 35 40 45

Thr Glu Xaa Ser Cys Leu Pro Asp Ser Met Ala Phe Val Ser Ile Arg  
 50 55 60

Val  
 65

4753

&lt;210&gt; 5331

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5331

Ile	Pro	Ala	Leu	Leu	Leu	Thr	Ser	Leu	Gly	Pro	Trp	Arg	Met	Leu	Ser
1				5					10					15	

Ile	Ser	Leu	Ser	Leu	Ser	Val	Leu	Leu	Cys	Lys	Met	Trp	Met	Ile	Pro
		20						25					30		

Asp	Ser	Gln	Ala	Phe	Cys	Gln	Asp	Tyr	Met	Gly	Phe	Leu	His	Ser	Ala
		35					40					45			

Met	Ser	Ser	Asp	Asn	Ile	Asn	Thr	Lys	Ser	Asn	Leu	Leu	Asn	Val
	50					55					60			

&lt;210&gt; 5332

&lt;211&gt; 404

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (151)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (223)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5332

Met	Pro	Asp	Gly	Ala	Thr	Leu	Ala	Ile	Gly	Ser	Ser	Arg	Gly	Lys	Ile
1				5					10					15	

Tyr	Gln	Tyr	Asp	Leu	Arg	Met	Leu	Lys	Ser	Pro	Val	Lys	Thr	Ile	Ser
			20					25					30		

Ala	His	Lys	Thr	Ser	Val	Gln	Cys	Ile	Xaa	Phe	Gln	Tyr	Ser	Thr	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 4754

35	40	45
Leu Thr Lys Ser Ser Leu Asn Lys Gly Cys Ser Asn Lys Pro Thr Thr		
50	55	60
Val Asn Lys Arg Met Phe Asn Val Asn Ala Ala Ser Gly Gly Val Gln		
65	70	75
		80
Asn Ser Gly Ile Val Arg Glu Ala Pro Ala Thr Ser Ile Ala Thr Val		
	85	90
		95
Leu Pro Gln Pro Met Thr Ser Ala Met Gly Lys Gly Thr Val Ala Val		
	100	105
		110
Gln Glu Lys Ala Gly Leu Pro Arg Ser Ile Asn Thr Asp Thr Leu Ser		
	115	120
		125
Lys Glu Thr Asp Ser Gly Lys Asn Gln Asp Phe Ser Ser Phe Asp Asp		
	130	135
		140
Thr Gly Lys Ser Ser Leu Xaa Asp Met Phe Ser Pro Ile Arg Asp Asp		
	145	150
		155
		160
Ala Val Val Asn Lys Gly Ser Asp Glu Ser Ile Gly Lys Gly Asp Gly		
	165	170
		175
Phe Asp Phe Leu Pro Gln Leu Asn Ser Val Phe Pro Pro Arg Lys Asn		
	180	185
		190
Pro Val Thr Ser Ser Thr Ser Val Leu His Ser Ser Pro Leu Asn Val		
	195	200
		205
Phe Met Gly Ser Pro Gly Lys Glu Glu Asn Glu Asn Arg Asp Xaa Thr		
	210	215
		220
Ala Glu Ser Lys Lys Ile Tyr Met Gly Lys Gln Glu Ser Lys Asp Ser		
	225	230
		235
		240
Phe Lys Gln Leu Ala Lys Leu Val Thr Ser Gly Ala Glu Ser Gly Asn		
	245	250
		255
Leu Asn Thr Ser Pro Ser Ser Asn Gln Thr Arg Asn Ser Glu Lys Phe		
	260	265
		270
Glu Lys Pro Glu Asn Glu Ile Glu Ala Gln Leu Ile Cys Glu Pro Pro		
	275	280
		285
Ile Asn Gly Ser Ser Thr Pro Asn Pro Lys Ile Ala Ser Ser Val Thr		
	290	295
		300
Ala Gly Val Ala Ser Ser Leu Ser Glu Lys Ile Ala Asp Ser Ile Gly		



## 4755

305                      310                      315                      320  
 Asn Asn Arg Gln Asn Ala Pro Leu Thr Ser Ile Gln Ile Arg Phe Ile  
                                  325                      330                      335  
 Gln Asn Met Ile Gln Glu Thr Leu Asp Asp Phe Arg Glu Ala Cys His  
                                  340                      345                      350  
 Arg Asp Ile Val Asn Leu Gln Val Glu Met Ile Lys Gln Phe His Met  
                                  355                      360                      365  
 Gln Leu Asn Glu Met His Ser Leu Leu Glu Arg Tyr Ser Val Asn Glu  
                                  370                      375                      380  
 Gly Leu Val Ala Glu Ile Glu Arg Leu Arg Glu Glu Asn Lys Arg Leu  
 385                                   390                      395                      400  
 Arg Ala His Phe

&lt;210&gt; 5333

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (12)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5333

Arg Lys Pro Gln Thr Pro Thr Ala Leu Cys Thr Xaa Trp Cys Pro His  
 1                      5                      10                      15

Phe Gln Lys Lys Lys Lys Lys Ile Ser Lys Ile Glu Phe Lys Lys Ser  
                                  20                      25                      30

His Leu Ser Cys Pro Ala Asn Ile Cys Ser Ser Leu Val Gly Ala Val  
                                  35                      40                      45

Glu Ala Ser Thr His Arg Gln Ala Val Ala Gly Thr Val Lys Gly Lys  
                                  50                      55                      60

Thr Pro  
 65

&lt;210&gt; 5334

4756

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (251)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5334

Pro Arg Val Arg Arg Glu Val Gln Ser Leu Lys Glu Gln His Gln Lys  
 1 5 10 15

Glu Ile Ser Glu Leu Asn Glu Thr Phe Leu Ser Asp Ser Glu Lys Glu  
 20 25 30

Lys Leu Thr Leu Met Phe Glu Ile Gln Gly Leu Lys Glu Gln Cys Glu  
 35 40 45

Asn Leu Gln Gln Glu Lys Gln Glu Ala Ile Leu Asn Tyr Glu Ser Leu  
 50 55 60

Arg Glu Ile Met Glu Ile Leu Gln Thr Glu Leu Gly Glu Ser Ala Gly  
 65 70 75 80

Lys Ile Ser Gln Glu Phe Glu Ser Met Lys Gln Gln Gln Ala Ser Asp  
 85 90 95

Val His Glu Leu Gln Gln Lys Leu Arg Thr Ala Phe Thr Glu Lys Asp  
 100 105 110

Ala Leu Leu Glu Thr Val Asn Arg Leu Gln Gly Glu Asn Glu Lys Leu  
 115 120 125

Leu Ser Gln Gln Glu Leu Val Pro Glu Leu Glu Asn Thr Ile Lys Asn  
 130 135 140

Leu Gln Glu Lys Asn Gly Val Tyr Leu Leu Ser Leu Ser Gln Arg Asp  
 145 150 155 160

Thr Met Leu Lys Glu Leu Glu Gly Lys Ile Asn Ser Leu Thr Glu Glu  
 165 170 175

Lys Asp Asp Phe Ile Asn Lys Leu Lys Asn Ser His Glu Glu Met Asp  
 180 185 190

Asn Phe His Lys Lys Cys Glu Arg Glu Glu Arg Leu Ile Leu Glu Leu  
 195 200 205

Gly Lys Lys Val Glu Gln Thr Ile Gln Tyr Asn Ser Glu Leu Glu Gln  
 210 215 220

4757

Lys Val Asn Glu Leu Thr Gly Gly Leu Glu Glu Thr Leu Lys Glu Lys  
 225 230 235 240

Asp Gln Asn Asp Gln Lys Leu Glu Lys Leu Xaa Gly Ser Asn Glu Ser  
 245 250 255

Ser Leu

<210> 5335

<211> 60

<212> PRT

<213> Homo sapiens

<400> 5335

Tyr Ala Ile Ile Met Gln Leu Asn Val Asp Glu Ser Gly Arg Gly Trp  
 1 5 10 15

Ala Gln Met Val Pro His Asp Pro Gly Ile Asp Pro Glu Phe Pro Glu  
 20 25 30

Glu Trp Val Asp Asn Thr Tyr Ser Asn Lys Asn Pro Phe Leu Leu Phe  
 35 40 45

Ser Ile Lys Leu Leu Ser Lys Ile Ile Asp Arg Leu  
 50 55 60

<210> 5336

<211> 124

<212> PRT

<213> Homo sapiens

<400> 5336

Leu Cys His Glu Lys Leu Ser Leu Leu Glu Asp Phe Lys Asp Phe Arg  
 1 5 10 15

Asp Ser Cys Ser Ser Ser Glu Arg Thr Asp Gly Arg Tyr Ser Lys Tyr  
 20 25 30

Arg Val Arg Arg Asn Ser Leu Gln His His Gln Asp Asp Thr Lys Tyr  
 35 40 45

Arg Thr Lys Ser Phe Lys Gly Asp Arg Thr Phe Leu Glu Gly Tyr His  
 50 55 60

Thr Arg Gly Leu Asp His Ser Ser Ser Trp Gln Asp His Ser Arg Phe

4758

65                                      70                                      75                                      80  
 Leu Ser Ser Pro Arg Phe Ser Tyr Val Asn Ser Phe Thr Lys Arg Thr  
    85                                      90                                      95  
 Val Ala Pro Asp Ser Ala Ser Asn Lys Glu Asp Ala Thr Met Asn Gly  
    100                                      105                                      110  
 Thr Ser Ser Gln Pro Lys Lys Glu Glu Tyr Gly Ser  
    115                                      120

&lt;210&gt; 5337

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (110)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (122)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5337

Met Ser Arg Thr Arg Pro Ala Arg Pro Met Gly Trp Gly Gln Gln Arg  
 1                                      5                                      10                                      15

His Ser Pro Leu Val Val Gln Arg Gln Leu Xaa Arg Glu Gly Ser Ser  
    20                                      25                                      30

Pro Glu Gly Ser Thr Arg Arg Thr Ile Glu Gly Gln Ser Pro Glu Pro  
    35                                      40                                      45

Val Phe Gly Asp Ala Asp Val Asp Val Ser Ala Val Gln Ala Lys Leu  
    50                                      55                                      60

Gly Ala Leu Glu Leu Asn Gln Arg Asp Ala Ala Ala Glu Thr Glu Leu  
    65                                      70                                      75                                      80

Arg Val His Pro Pro Cys Gln Arg His Cys Pro Glu Pro Arg Val His  
    85                                      90                                      95

4759

Pro Lys Lys Thr Lys Pro Pro Ala Lys Leu Pro Lys Val Xaa Thr Gln  
 100 105 110

Lys Pro Pro Ser Leu Ala Leu Phe Pro Xaa Ser Ser Pro Cys Gly Asn  
 115 120 125

Leu Leu Leu Ala Arg Lys Phe Gly  
 130 135

&lt;210&gt; 5338

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5338

Val Leu Asp Arg Glu Arg Pro Ser Phe Phe Phe Phe Phe Ser Val Gln  
 1 5 10 15

Ala Gln Phe Cys His Gln Phe Asp Tyr Glu Lys Ser Phe Gly Leu Pro  
 20 25 30

Gly Ser Phe Gly Ala Trp Lys Leu Gln Met Arg Asp Gly Gly Leu His  
 35 40 45

Cys Phe Ala Ala Gly Glu Arg Glu Leu Ile Arg Ser Leu Pro Thr Glu  
 50 55 60

Val Gly Val Met Pro Asp Ala Glu Arg Ser Gly Ser Pro Arg Ala Gln  
 65 70 75 80

Ala Pro Cys Gly Arg Cys Pro Gln Arg Ala Ser Pro Pro Pro Arg Pro  
 85 90 95

Gly Ser Tyr Leu Leu His Asp Leu Leu Pro Arg Arg Ala Ala Tyr Leu  
 100 105 110

Leu Asp Gly Leu Leu Asp Val Leu  
 115 120

&lt;210&gt; 5339

&lt;211&gt; 45

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

## 4760

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5339

Ala Gly Met Met Tyr Leu Xaa Asn His Thr Pro Val Leu Ile Ser His  
 1 5 10 15

Gln Ile Ser Met Phe Thr Phe Ser Val Trp Met Ser Gly Arg Thr Leu  
 20 25 30

Lys Asn Trp Gln Ser Cys Pro Thr His Ala Glu His Leu  
 35 40 45

&lt;210&gt; 5340

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5340

Arg Ser Ala Pro Pro Gly Arg Cys Arg Pro Trp Pro Val Pro Ser Pro  
 1 5 10 15

Arg Phe Ser Ala Pro Arg Ala Val Pro Ser Gln Ser Pro Ala Pro Arg  
 20 25 30

Tyr Arg Ala Asp Arg Pro Ser Arg Arg Leu Pro Val Pro Gly Thr Pro  
 35 40 45

Ala Arg Pro Leu Ala Arg Ser Pro Pro Ala Ala His Val Pro Gly Ala  
 50 55 60

Gly Pro Arg Ala Gly Gly Arg Ala Ala Arg Arg Ser Gln Ala Gly Leu  
 65 70 75 80

Cys Ser Val Pro Met Ala Ala Ala Gly Trp Arg Asp Gly Ser Gly Gln  
 85 90 95

Glu Lys Tyr Arg Leu Val Val Val Gly Gly Gly Gly Val Gly Lys Ser  
 100 105 110

Ala Leu Thr Ile Gln Phe Ile Gln Ser Tyr Phe Val Thr Asp Tyr Asp  
 115 120 125

Pro Thr Ile Glu Asp Ser Tyr Thr Lys Gln Cys Val Ile Asp Asp Arg  
 130 135 140

Ala Ala Arg Leu Asp Ile Leu Asp Thr Ala Gly Gln Glu Glu Phe Gly  
 145 150 155 160

## 4761

Ala Met Arg Glu Gln Tyr Met Arg Thr Gly Glu Gly Phe Leu Leu Val  
                           165                          170                          175

Phe Ser Val Thr Asp Arg Gly Ser Phe Glu Glu Ile Tyr Lys Phe Gln  
                           180                          185                          190

Arg Gln Ile Leu Arg Val Lys Asp Arg Asp Glu Phe Pro Met Ile Leu  
                           195                          200                          205

Ile Gly Asn Lys Ala Asp Leu Asp His Gln Arg Gln Val Thr Gln Glu  
                           210                          215                          220

Glu Gly Gln Gln Leu Ala Arg Gln Leu Lys Val Thr Tyr Met Glu Ala  
                           225                          230                          235                          240

Ser Ala Lys Ile Arg Met Asn Val Asp Gln Ala Phe His Glu Leu Val  
                           245                          250                          255

Arg Val Ile Arg Lys Phe Gln Glu Gln Glu Cys Pro Pro Ser Pro Glu  
                           260                          265                          270

Pro Thr Arg Lys Glu Lys Asp Lys Lys Gly Cys His Cys Val Ile Phe  
                           275                          280                          285

&lt;210&gt; 5341

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (88)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5341

Ala Ala Ala Glu Arg Asp Val Pro Pro Pro Pro Pro Pro Pro Pro Pro  
   1                          5                          10                          15

Pro Ser Glu Pro Leu Leu Ala Leu Arg Gly Gly Ala Thr Asp Ala Cys  
                           20                          25                          30

Leu Ala Arg Arg Thr Leu Arg Asp Pro Gly Ala Ala Gln Pro Ala Glu  
                           35                          40                          45

Pro Arg Arg Ser Pro Ala Pro Gly Ala Pro Gly Ser Gln Cys Arg Pro  
                           50                          55                          60

4762

Ala Gly Gly Pro Val Arg Glu Pro Arg Val Arg Glu Leu Arg Leu His  
 65 70 75 80  
 Pro Asp Ala Ala Val Ala Arg Xaa Gly Thr Gly His Tyr Leu Cys Asn  
 85 90 95  
 Ala Cys Gly Leu Tyr Ser Lys Met Asn Gly Leu Ser Arg Pro Leu Ile  
 100 105 110  
 Lys Pro Gln Lys Arg Val Pro Ser Ser Arg Arg Leu Gly Leu Ser Cys  
 115 120 125  
 Ala Asn Cys His Thr Thr Thr Thr Thr Leu Trp Arg Arg Asn Ala Glu  
 130 135 140  
 Gly Glu Pro Val Cys Asn Ala Cys Gly Leu Tyr Met Lys Leu His Gly  
 145 150 155 160  
 Val Pro Arg Pro Leu Ala Met Lys Lys Glu Gly Ile Gln Thr Arg Lys  
 165 170 175  
 Arg Lys Pro Lys Asn Ile Asn Lys Ser Lys Thr Cys Ser Gly Asn Ser  
 180 185 190  
 Asn Asn Ser Ile Pro Met Thr Pro Thr Ser Thr Ser Ser Asn Ser Asp  
 195 200 205  
 Asp Cys Ser Lys Asn Thr Ser Pro Thr Thr Gln Pro Thr Ala Ser Gly  
 210 215 220  
 Ala Gly Ala Pro Val Met Thr Gly Ala Gly Glu Ser Thr Asn Pro Glu  
 225 230 235 240  
 Asn Ser Glu Leu Lys Tyr Ser Gly Gln Asp Gly Leu Tyr Ile Gly Val  
 245 250 255  
 Ser Leu Ala Ser Pro Ala Glu Val Thr Ser Ser Val Arg Pro Asp Ser  
 260 265 270  
 Trp Cys Ala Leu Ala Leu Ala  
 275

&lt;210&gt; 5342

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5342



## 4763

Glu Glu Leu Glu Ala Arg Gly Leu Arg Trp Leu Pro Trp Val Phe Pro  
 1 5 10 15  
 Ser Arg Leu Cys Tyr Cys Val Arg Pro Phe Ser His Cys Gly His Val  
 20 25 30  
 Phe Leu Glu Ser Ile Phe Gln Val Leu Tyr Ile Gln His Ser Pro Pro  
 35 40 45  
 Ser Phe Ser Leu Ile Pro Phe  
 50 55

&lt;210&gt; 5343

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5343

Thr Glu Glu Ile Leu Arg Thr Arg Gly Ser Thr Arg Glu Phe Arg Thr  
 1 5 10 15  
 Gly Thr Cys Arg Arg Thr Ser Phe Pro Ile Val Ser Arg Ile Arg Ala  
 20 25 30  
 Trp Arg Asn His Gly His Ser Xaa Phe Leu Cys Glu Ile Gly Ile Arg  
 35 40 45  
 Ser Gln Phe His Thr Thr Tyr Glu Pro Glu Ala  
 50 55

&lt;210&gt; 5344

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5344

Ser Met His Lys Ala Gly Leu Leu Gly Leu Cys Ala Arg Ala Trp Asn  
 1 5 10 15  
 Ser Val Arg Met Ala Ser Ser Gly Met Thr Arg Arg Asp Pro Leu Ala  
 20 25 30

## 4764

Asn Lys Val Ala Leu Val Thr Ala Ser Thr Asp Gly Ile Gly Phe Ala  
           35                          40                          45  
 Ile Ala Arg Arg Leu Ala Gln Asp Gly Ala His Val Val Val Ser Ser  
           50                          55                          60  
 Arg Lys Gln Gln Asn Val Asp Gln Ala Val Ala Thr Leu Gln Gly Glu  
           65                          70                          75                          80  
 Gly Leu Ser Val Thr Gly Thr Cys Ala Met Trp Gly Arg Arg Arg Thr  
                           85                          90                          95  
 Gly Ser Gly Trp Trp Pro Arg  
                           100

<210> 5345  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5345  
 Ser Leu Tyr Met Leu Thr Asn Ser Lys Gly Lys Glu Ile Asp His Lys  
   1                          5                          10                          15  
 Leu His Val Asn Val Glu Gly Lys Leu Ile Asp His Lys Leu Lys Tyr  
                           20                          25                          30  
 Asn Leu Ile Cys Tyr Ile Phe Leu Leu Ile Tyr Ile Pro Met Lys Xaa  
           35                          40                          45  
 Phe Leu Tyr  
           50

<210> 5346  
 <211> 96  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (20)  
 <223> Xaa equals any of the naturally occurring L-amino acids

## 4765

&lt;400&gt; 5346

Cys Phe Ser Leu Pro Ser Leu Phe Thr Ala Val Lys Phe Ile Lys Cys  
 1 5 10 15  
 Phe Ser Val Xaa Phe Cys Ser Leu Ser Phe Thr Gly Tyr Phe Phe Met  
 20 25 30  
 Tyr Thr Phe Arg Ile Phe Cys Leu Leu Tyr Pro Val Val Gln Met Ile  
 35 40 45  
 Ser Tyr Ile Leu Gln Met Pro Phe Gln Phe Leu Phe Ser Phe Ser Ile  
 50 55 60  
 Lys Leu Pro Ser Cys Pro Asn Val Gln Phe Val Ser Val Cys Val Cys  
 65 70 75 80  
 Val Cys Val Cys Val Asn Leu Ile Phe Lys Ser Ala Arg Leu Pro Ile  
 85 90 95

&lt;210&gt; 5347

&lt;211&gt; 291

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5347

Arg Pro Asp Ser Arg Val Asp Pro Arg Val Arg Glu Val Thr Asp Tyr  
 1 5 10 15  
 Ala Ile Ala Arg Arg Ile Val Asp Leu His Ser Arg Ile Glu Glu Ser  
 20 25 30  
 Ile Asp Arg Val Tyr Ser Leu Asp Asp Ile Arg Arg Tyr Leu Leu Phe  
 35 40 45  
 Ala Arg Gln Phe Lys Pro Lys Ile Ser Lys Glu Ser Glu Asp Phe Ile  
 50 55 60  
 Val Glu Gln Tyr Lys His Leu Arg Gln Arg Asp Gly Ser Gly Val Thr  
 65 70 75 80  
 Lys Ser Ser Trp Arg Ile Thr Val Arg Gln Leu Glu Ser Met Ile Arg  
 85 90 95  
 Leu Ser Glu Ala Met Ala Arg Met His Cys Cys Asp Glu Val Gln Pro  
 100 105 110

4766

Lys His Val Lys Glu Ala Phe Arg Leu Leu Asn Lys Ser Ile Ile Arg  
           115                          120                          125  
 Val Glu Thr Pro Asp Val Asn Leu Asp Gln Glu Glu Glu Ile Gln Met  
           130                          135                          140  
 Glu Val Asp Glu Gly Ala Gly Gly Ile Asn Gly His Ala Asp Ser Pro  
 145                          150                          155                          160  
 Ala Pro Val Asn Gly Ile Asn Gly Tyr Asn Glu Asp Ile Asn Gln Glu  
                           165                          170                          175  
 Ser Ala Pro Lys Ala Ser Leu Arg Leu Gly Phe Ser Glu Tyr Cys Arg  
                           180                          185                          190  
 Ile Ser Asn Leu Ile Val Leu His Leu Arg Lys Val Glu Glu Glu Glu  
           195                          200                          205  
 Asp Glu Ser Ala Leu Lys Arg Ser Glu Leu Val Asn Trp Tyr Leu Lys  
           210                          215                          220  
 Glu Ile Glu Ser Glu Ile Asp Ser Glu Glu Glu Leu Ile Asn Lys Lys  
 225                          230                          235                          240  
 Arg Ile Ile Glu Lys Val Ile His Arg Leu Thr His Tyr Asp His Val  
                           245                          250                          255  
 Leu Ile Glu Leu Thr Gln Ala Gly Leu Lys Gly Ser Thr Glu Gly Ser  
                           260                          265                          270  
 Glu Ser Tyr Glu Glu Asp Pro Tyr Leu Val Val Asn Pro Asn Tyr Leu  
           275                          280                          285  
 Leu Glu Asp  
           290

&lt;210&gt; 5348

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5348

Thr Cys Ser Arg Ser Arg Ala Ala Ala Leu Leu Thr Val Leu Gly Val  
   1                          5                          10                          15  
 Cys Val Gln Ser Glu Gln Gly Leu Cys Phe Trp Ile Val Lys Glu Asp  
           20                          25                          30

4767

Ala

&lt;210&gt; 5349

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5349

Thr Pro Ala Gly Xaa Arg Ser Gly Asn Ser Arg Val Glu Gly Pro Leu

1

5

10

15

Ser Cys Leu Tyr Ser Phe Ser Leu Leu Tyr Ser Phe Thr Arg Ser Pro

20

25

30

His Leu Thr Ser Glu Leu Leu Gly Pro Leu Asp Pro His Ile Ser Trp

35

40

45

Ala Ile Ser Leu Phe Cys

50

&lt;210&gt; 5350

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5350

## 4768

Xaa Arg Lys Thr Leu Asp Val Xaa Xaa Thr Ile Met Gly Thr Arg Ile  
 1 5 10 15  
 Glu Gly Phe Phe Pro Leu Lys Ala Phe Leu Pro Gly Gly Trp Ala Leu  
 20 25 30  
 Leu Gly His Ala Leu Gln Ser Ser Val Pro Gln Gln Glu Ser Gly Gly  
 35 40 45  
 His His Leu Pro Ala Ser Ser Thr Phe Ser Ala Ser Leu Phe Ser Met  
 50 55 60  
 Asn Pro Gly Arg Pro Ala Gly Thr Ser Lys Phe Pro Gly Leu Ser Ala  
 65 70 75 80

<210> 5351  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<400> 5351  
 Gln Thr Leu Arg Thr Lys Met Asn Glu Asn Leu Phe Ala Ser Phe Ile  
 1 5 10 15  
 Ala Pro Thr Ile Leu Gly Leu Pro Ala Ala Val Leu Ile Ile Leu Phe  
 20 25 30  
 Pro Pro Leu Leu Ile Pro Thr Ser Lys Tyr Leu Ile Asn Asn Arg Leu  
 35 40 45  
 Ile Thr Thr Gln Gln  
 50

<210> 5352  
 <211> 185  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (113)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <400> 5352

## 4769

Arg Cys Pro Thr Arg Ser Pro Pro Pro Asp Thr Pro Gly Ser Arg Gly  
 1 5 10 15  
 Thr Thr Ala Met Cys Ser Leu Ala Ser Gly Ala Thr Gly Gly Arg Gly  
 20 25 30  
 Ala Val Glu Asn Glu Glu Asp Leu Pro Glu Leu Ser Asp Ser Gly Asp  
 35 40 45  
 Glu Ala Ala Trp Glu Asp Glu Asp Asp Ala Asp Leu Pro His Gly Lys  
 50 55 60  
 Gln Gln Thr Pro Cys Leu Phe Cys Asn Arg Leu Phe Thr Ser Ala Glu  
 65 70 75 80  
 Glu Thr Phe Ser His Cys Lys Ser Glu His Gln Phe Asn Ile Asp Ser  
 85 90 95  
 Met Val His Lys His Gly Leu Glu Phe Tyr Gly Tyr Ile Lys Leu Ile  
 100 105 110  
 Xaa Phe Ile Arg Leu Lys Asn Pro Thr Val Glu Tyr Met Asn Ser Ile  
 115 120 125  
 Tyr Asn Pro Val Pro Trp Glu Lys Glu Glu Tyr Leu Lys Pro Val Leu  
 130 135 140  
 Glu Asp Asp Leu Leu Leu Gln Phe Asp Val Glu Asp Leu Tyr Glu Pro  
 145 150 155 160  
 Val Ser Val Pro Phe Ser Tyr Pro Asn Gly Leu Ser Glu Asn Thr Ser  
 165 170 175  
 Val Val Glu Lys Leu Lys His Met Glu  
 180 185

&lt;210&gt; 5353

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5353

Tyr Ile Lys Ala Leu Leu Ser Ser Asp Tyr Ala Tyr Phe Ala Ser Arg  
 1 5 10 15

Glu Thr Glu Ala Trp Val Gly Gln Arg Gly Ala His Val Phe Thr Ala  
 20 25 30

Leu Ser Ala Pro Asp Phe Gly Ala Ile Ser Leu His Pro Cys Ala Pro

4770

35 40 45

Val Lys Asn Leu Ala Ser Thr Phe Cys Ser Pro Asp Pro Pro Ser Leu  
50 55 60

Thr Cys Gly Ser Cys His Thr Lys Met Gly Leu Pro  
65 70 75

<210> 5354  
<211> 62  
<212> PRT  
<213> Homo sapiens

<400> 5354

Gly Thr Gln Leu Ile Thr Arg Arg Ile Asn Trp Pro Lys Phe Leu Ile  
1 5 10 15

Phe Gln Phe Val Ala Pro Ala Pro Arg Asp His Gln Lys Leu Phe Trp  
20 25 30

Val Ser Leu Ser Leu Arg Arg Asp Pro Leu His Arg Pro Ser Leu Ile  
35 40 45

Leu Ile Ser Pro Cys Pro Glu Ser Val Asn Val Pro Arg Lys  
50 55 60

<210> 5355  
<211> 80  
<212> PRT  
<213> Homo sapiens

<400> 5355

Gly His Val Asp Asn Leu Arg Tyr His Ser Ile Val His Asn Val His  
1 5 10 15

His Tyr Ser Val Asp Cys Lys Gly Leu Leu Ser Ser Cys Lys Asn Tyr  
20 25 30

Pro Ser Lys Ser Ile Phe Lys Val Leu Val Leu Leu Ile Tyr Lys Leu  
35 40 45

Cys Ala Arg Ser Pro Lys Val Asn Ser Asn Ile Tyr Leu Lys Tyr Ser  
50 55 60

Leu Ser Tyr Leu Ile Asn Leu Trp Tyr Ile Phe Leu Tyr Tyr Ala Cys  
65 70 75 80



4771

&lt;210&gt; 5356

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5356

Leu Lys Met Lys Thr Pro Phe Phe Ile Phe Asn Leu Ala Glu Thr Ala  
 1 5 10 15

His Met Pro Ser Lys Val Lys Ala Gln Leu Tyr Ala Gln Ala Tyr Asp  
 20 25 30

Leu Tyr Lys Glu Ile Val Tyr Leu Gln Lys Glu His Pro Val Asn Trp  
 35 40 45

His Lys Asn Tyr Ala Ile Ala Cys Glu Arg Met Leu Arg Leu Gln Ala  
 50 55 60

Arg Asp Ala Asp Pro Glu Val Leu Leu Ser Glu Thr Ile Arg His Phe  
 65 70 75 80

Arg Leu Tyr Ser Gln Lys Ala Pro Asn Asp Pro Gln Gln Ala Asp Ile  
 85 90 95

Leu Gly Ala Leu Lys His Leu Arg Lys Glu Leu Gln Ser Leu Arg Asn  
 100 105 110

Arg Lys Asn Val  
 115

&lt;210&gt; 5357

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (110)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5357

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Glu Pro Ala Gly His  
 1 5 10 15

4772

Ser Gln Lys Lys Gly Lys Ala Ile Asn Ile Gly Gln Leu Val Asp Val  
                   20                  25                  30  
 Lys Val Leu Glu Lys Thr Lys Asp Gly Leu Glu Val Ala Val Leu Pro  
                   35                  40                  45  
 His Asn Ile Arg Ala Phe Leu Pro Thr Ser His Leu Ser Asp His Val  
                   50                  55                  60  
 Ala Asn Gly Pro Leu Leu His His Trp Leu Gln Ala Gly Asp Ile Leu  
                   65                  70                  75                  80  
 His Arg Val Leu Cys Leu Ser Gln Ser Glu Gly Arg Val Leu Leu Cys  
                   85                  90                  95  
 Arg Lys Pro Ala Leu Val Ser Thr Val Glu Gly Gly Gln Xaa Pro Lys  
                   100                  105                  110  
 Asn Phe Ser Glu Ile His Pro Gly Met Leu Leu Ile Gly Phe Val Lys  
                   115                  120                  125  
 Ser Ile Lys Asp Tyr Gly Val Phe Ile Gln Phe Pro Ser Gly Leu Ser  
                   130                  135                  140  
 Gly Leu Ala Pro Lys Ala Ile Met Ser Asp Lys Phe Val Thr Ser Thr  
                   145                  150                  155                  160  
 Ser Asp His Phe Val Glu Gly Gln Thr Val Ala Ala Lys Val Thr Asn  
                   165                  170                  175  
 Val Asp Glu Glu Lys Gln Arg Met  
                   180

&lt;210&gt; 5358

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5358

Asn Leu Arg Phe Asp Asp Ala Glu Ala Leu Asp Tyr Thr Phe Ala Tyr  
                   1                  5                  10                  15  
 Phe Asp Lys Val His Leu Ser Leu Phe Ile Ser Ser Val Phe Phe Cys  
                   20                  25                  30  
 Tyr Gln Arg Gln Leu Ile Ser Phe Val Pro Gln Tyr Phe Phe Cys Lys  
                   35                  40                  45  
 Tyr Leu Pro Lys Phe Phe Gln Ile Leu Cys Lys Met Gln Val Ile Val

4773

50                                      55                                      60  
 Glu Met Pro Val Tyr Ala Phe Met Leu Ala Ser Leu Asn  
 65                                      70                                      75  
  
 <210> 5359  
 <211> 83  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 5359  
 Gln Ser Val Tyr Lys Arg Gly Leu Gln Lys Lys Met Arg Ala Cys Phe  
 1                                      5                                      10                                      15  
 Thr Gln Gln Lys Ile Trp Pro Phe Leu Asn Asp Thr Arg Arg Val Ile  
                                     20                                      25                                      30  
 Leu Ser His Thr Phe Pro Ser Phe Arg Trp Trp Thr Phe Val Glu Thr  
                                     35                                      40                                      45  
 Gly Thr Gln Trp Ser Asn Arg Leu Cys Pro Pro Val Ala Asp Ser Pro  
                                     50                                      55                                      60  
 Ala Gly Arg Trp Thr Arg Gly Pro Val Leu Thr Val Thr Arg Leu Ser  
 65                                      70                                      75                                      80  
 Leu Leu Glu

<210> 5360  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 5360  
 Phe Tyr Pro Gly Arg Lys Ile Lys Gly Ser His Arg Ile Ala Leu Val  
 1                                      5                                      10                                      15  
 Lys Thr Lys His Thr Ile Ala Leu Thr Glu Tyr Leu Gly Asn Leu Pro  
                                     20                                      25                                      30  
 Asn Leu Leu Ile Phe Gly Val Cys Phe Leu Thr Val Gly Leu Trp Glu  
                                     35                                      40                                      45  
 Asp Val Ile Tyr Asp Gln Tyr Leu Pro Val Thr Leu Phe Ile Ser Leu  
                                     50                                      55                                      60

4774

Ala Leu Lys Ala Asn Gly Gly Lys Lys Ser Met Lys Lys Lys Arg Leu  
 65 70 75 80

Ile Lys

<210> 5361

<211> 100

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (98)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (100)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5361

Gly Lys Met Cys Ala Ala Gln Val Arg Glu Tyr Tyr Leu Ala Xaa Lys  
 1 5 10 15

Lys Lys Lys Gly Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys  
 20 25 30

Met Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu  
 35 40 45

Ala Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln  
 50 55 60

Leu Asn Arg Leu Ala Xaa His Pro Pro Phe Ala Ser Trp Arg Asn Ser  
 65 70 75 80

Glu Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Lys Pro Glu  
 85 90 95

4775

Trp Xaa Met Xaa  
100

&lt;210&gt; 5362

&lt;211&gt; 379

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5362

Arg Pro Thr Arg Pro Val Phe Tyr Ala Xaa Glu Ser Trp Ile Lys Tyr  
1 5 10 15

Asp Val Gln Glu Arg Gln Lys Tyr Leu Ala Gln Leu Leu Asn Ser Val  
20 25 30

Arg Leu Pro Leu Leu Ser Val Lys Phe Leu Thr Arg Leu Tyr Glu Ala  
35 40 45

Asn His Leu Ile Arg Asp Asp Arg Thr Cys Lys His Leu Leu Asn Glu  
50 55 60

Ala Leu Lys Tyr His Phe Met Pro Glu His Arg Leu Ser His Gln Thr  
65 70 75 80

Val Leu Met Thr Arg Pro Arg Cys Ala Pro Lys Val Leu Cys Ala Val  
85 90 95

Gly Gly Lys Ser Gly Leu Phe Ala Cys Leu Asp Ser Val Glu Met Tyr  
100 105 110

Phe Pro Gln Asn Asp Ser Trp Ile Gly Leu Ala Pro Leu Asn Ile Pro  
115 120 125

Arg Tyr Glu Phe Gly Ile Cys Val Leu Asp Gln Lys Val Tyr Val Ile  
130 135 140

Gly Gly Ile Ala Thr Asn Val Arg Pro Gly Val Thr Ile Arg Lys His  
145 150 155 160

Glu Asn Ser Val Glu Cys Trp Asn Pro Asp Thr Asn Thr Trp Thr Ser  
165 170 175

Leu Glu Arg Met Asn Glu Ser Arg Ser Thr Leu Gly Val Val Val Leu

4776

180                                      185                                      190  
 Ala Gly Glu Leu Tyr Ala Leu Gly Gly Tyr Asp Gly Gln Ser Tyr Leu  
           195                                      200                                      205  
 Gln Ser Val Glu Lys Tyr Ile Pro Lys Ile Arg Lys Trp Gln Pro Val  
           210                                      215                                      220  
 Ala Pro Met Thr Thr Thr Arg Ser Cys Phe Ala Ala Ala Val Leu Asp  
 225                                      230                                      235                                      240  
 Gly Met Ile Tyr Ala Ile Gly Gly Tyr Gly Pro Ala His Met Asn Ser  
                                     245                                      250                                      255  
 Val Glu Arg Tyr Asp Pro Ser Lys Asp Ser Trp Glu Met Val Ala Ser  
                                     260                                      265                                      270  
 Met Ala Asp Lys Arg Ile His Phe Gly Val Gly Val Met Leu Gly Phe  
           275                                      280                                      285  
 Ile Phe Val Val Gly Gly His Asn Gly Val Ser His Leu Ser Ser Ile  
           290                                      295                                      300  
 Glu Arg Tyr Asp Pro His Gln Asn Gln Trp Thr Val Cys Arg Pro Met  
 305                                      310                                      315                                      320  
 Lys Glu Pro Arg Thr Gly Val Gly Ala Ala Val Ile Asp Asn Tyr Leu  
                                     325                                      330                                      335  
 Tyr Val Val Gly Gly His Ser Gly Ser Ser Tyr Leu Asn Thr Val Gln  
                                     340                                      345                                      350  
 Lys Tyr Asp Pro Ile Ser Asp Thr Trp Leu Asp Ser Ala Gly Met Ile  
           355                                      360                                      365  
 Tyr Cys Arg Cys Asn Phe Gly Leu Thr Ala Leu  
           370                                      375

&lt;210&gt; 5363

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5363

Lys His Trp Thr Ser Leu Thr Tyr Phe Phe Ser Phe Ser Ala Phe Arg  
   1                                      5                                      10                                      15

Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr Pro  
           20                                      25                                      30

4777

Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His Glu  
 35 40 45

Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe Thr  
 50 55 60

Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His Gln  
 65 70 75 80

Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Met Ile Asp Ile Phe  
 85 90 95

Cys Ser Ala Glu Phe Arg Asp Trp Asn Cys Lys Ser Ile Phe Met Arg  
 100 105 110

Val Glu Asp Glu Leu Glu Ile Pro Pro Ala Pro Gln Ser Gln His Phe  
 115 120 125

Gln Asn  
 130

<210> 5364  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 5364  
 Ser Ser Ala Leu Glu Val Leu Glu Phe Leu Ile Ser Phe Ile Gln Phe  
 1 5 10 15

Gln Gly Leu Ile Phe Tyr Arg Leu Pro Arg Gln Phe Ile Gln Gly Leu  
 20 25 30

Leu Tyr Leu Arg Phe Thr Cys His Val Arg Ser Ser Gly Phe Glu His  
 35 40 45

Lys Leu Tyr Ser Trp Asp Leu Ser Asp Thr Pro Leu Leu Thr Gly Leu  
 50 55 60

Gly Phe His Phe Ser Asp Pro Phe  
 65 70

<210> 5365  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

4778

&lt;400&gt; 5365

Ser Ala Pro Ser Pro Asn Leu Leu Pro Leu Gly Arg Val Gly Leu Arg  
1 5 10 15

Asp Leu Leu Ser Trp Lys Val Leu Thr Leu Pro Gly Glu Gly Ala Arg  
20 25 30

His Cys Pro Arg Glu Ser Asn Arg Arg Trp Lys Lys Ser Ile Lys Ser  
35 40 45

Asp Gln Asp Gly Gly Lys Lys Lys Lys Lys Lys Arg Gly Gly  
50 55 60

&lt;210&gt; 5366

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5366

Gln Leu Val Thr Val Glu Glu Ala Gly Trp Val Phe Ser Gly Pro Arg  
1 5 10 15

Lys Phe Lys Met Ser Ala Met Leu Ser Ile Ile Thr Phe Cys Cys Gln  
20 25 30

Lys Gly Trp Gln Ile Glu Ala Phe Leu Pro Ile Ala Phe Ser Glu Leu  
35 40 45

Pro Cys Gln Ser Phe Thr Leu Gly Lys Glu Arg Trp Ala Gly Ile Leu  
50 55 60

Gly Asn Arg Thr Pro Glu Thr Tyr Leu Cys Leu Pro Lys Asn Val Asp  
65 70 75 80

&lt;210&gt; 5367

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (53)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids



4779

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (360)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5367

Leu Pro Gln Ala Gln Gly Asp Gln Phe Pro Trp Glu Gln Ala Glu Gly  
 1 5 10 15

Gln Ala Pro Gly Glu Asp Gly Gln Arg Leu Pro Asp Gln Ile His Pro  
 20 25 30

Gly Val Pro Ala Arg Arg Arg Pro Trp Trp Arg Glu Arg Ala Arg Ala  
 35 40 45

Val Arg Gly Leu Xaa Glu Gly Arg Glu Pro Glu Lys Arg Arg Glu Arg  
 50 55 60

Lys Gln Arg Arg Glu Gly Gly Asp Gly Glu Glu Gln Asp Val Gly Asp  
 65 70 75 80

Ala Gly Arg Leu Leu Leu Arg Val Leu His Val Ser Glu Asn Pro Val  
 85 90 95

Pro Leu Thr Val Arg Val Ser Pro Glu Val Arg Asp Val Arg Pro Tyr  
 100 105 110

Ile Val Gly Ala Val Val Arg Gly Met Asp Leu Gln Pro Gly Asn Ala  
 115 120 125

Leu Lys Arg Phe Leu Thr Ser Gln Thr Lys Leu His Glu Asp Leu Cys  
 130 135 140

Glu Lys Arg Thr Ala Ala Thr Leu Ala Thr His Glu Leu Arg Ala Val  
 145 150 155 160

Lys Gly Pro Leu Leu Tyr Cys Ala Arg Pro Pro Gln Asp Leu Lys Ile  
 165 170 175

Val Pro Leu Gly Arg Lys Glu Ala Lys Ala Lys Glu Leu Val Arg Gln  
 180 185 190

Leu Gln Leu Glu Ala Glu Glu Gln Arg Lys Gln Lys Lys Arg Gln Ser  
 195 200 205

Val Ser Gly Leu His Arg Tyr Leu His Leu Leu Asp Gly Asn Glu Asn  
 210 215 220

Tyr Pro Cys Leu Val Asp Ala Asp Gly Asp Val Ile Ser Phe Pro Pro  
 225 230 235 240

4780

Ile Thr Asn Ser Glu Lys Thr Lys Val Lys Lys Thr Thr Ser Asp Leu  
                                   245                                  250                                  255  
 Phe Leu Glu Val Thr Ser Ala Thr Ser Leu Gln Ile Cys Lys Asp Val  
                                   260                                  265                                  270  
 Met Asp Ala Leu Ile Leu Lys Met Ala Glu Met Lys Lys Tyr Thr Leu  
                                   275                                  280                                  285  
 Glu Asn Lys Glu Glu Gly Ser Leu Ser Asp Thr Glu Ala Asp Ala Val  
                                   290                                  295                                  300  
 Ser Gly Gln Leu Pro Asp Pro Thr Thr Asn Pro Ser Ala Gly Lys Asp  
 305                                  310                                  315                                  320  
 Gly Pro Ser Leu Leu Val Val Glu Gln Val Arg Val Val Asp Leu Glu  
                                   325                                  330                                  335  
 Gly Ser Leu Lys Val Val Tyr Pro Ser Lys Ala Asp Leu Ala Thr Ala  
                                   340                                  345                                  350  
 Pro Pro His Val Thr Val Val Xaa  
                                   355                                  360

&lt;210&gt; 5368

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5368

Ala Arg Xaa Pro Thr Leu Thr Lys Gly Asn Lys Ser Trp Ser Ser Thr  
   1                                  5                                  10                                  15

## 4781

Ala Val Xaa Xaa Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn  
                   20                  25                  30

Ser Ala Arg Asp Phe Glu His Ser Ser Asp Ile  
           35                  40

<210> 5369

<211> 78

<212> PRT

<213> Homo sapiens

<400> 5369

Leu Gln Thr Lys Pro Ser Pro Ala Phe Phe Leu Leu Leu Leu Val Leu  
   1                  5                  10                  15

Gln Leu Gln Gly Pro Phe Thr Phe Met Ser Glu Met Glu Leu Trp Leu  
                   20                  25                  30

Phe Gln Trp Lys Asn Met Leu Lys Val Ser Phe Cys Ser Arg Lys Lys  
           35                  40                  45

Lys Ser Leu Pro Lys Trp Gly Lys Lys Leu Tyr Ile Tyr Leu Ile Ile  
       50                  55                  60

Gln Asn Thr Asp Gln Ser Leu Asp Leu Lys Lys Lys Lys Lys  
   65                  70                  75

<210> 5370

<211> 47

<212> PRT

<213> Homo sapiens

<400> 5370

Gly Ile Thr Ile Arg Lys Thr Val Cys Thr Cys Ser Leu Gln Met Gln  
   1                  5                  10                  15

Pro Leu Leu Ser Leu Thr Thr Ser Phe Tyr Leu Gln Leu Ile Glu Ser  
           20                  25                  30

Met Asp Val Glu Pro Val His Met Glu Gly Gln Leu Tyr Tyr Lys  
       35                  40                  45

<210> 5371

<211> 61

<212> PRT

4782

&lt;213&gt; Homo sapiens

&lt;400&gt; 5371

Thr Val Leu Ser Leu Ala Gly Leu Leu Gly Gly Lys Tyr Leu Gln Asn  
1 5 10 15

Asn Gly Ile Val Leu Gly Phe Leu Leu Ala Leu Glu Thr His Leu Phe  
20 25 30

Thr Asn Arg Phe Pro Glu Asp Thr Leu Ile Ser Pro Ser Tyr Leu Pro  
35 40 45

Glu Cys Leu Leu Met Ala Ser Leu Lys Lys Gly Gly Leu  
50 55 60

&lt;210&gt; 5372

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5372

Ser Ser Cys Pro Lys Ala Leu Trp Gly Pro Gly Trp Arg Ser Gln Gly  
1 5 10 15

Ile Leu Tyr Asp Leu Ala Ile Gly Cys Lys Arg Lys His Ile Pro Cys  
20 25 30

Cys Gly Ser Cys Ile Leu Phe His Ser Ser Pro Leu Lys Glu Lys Val  
35 40 45

His Val Leu Ser Pro Ala His Pro  
50 55

&lt;210&gt; 5373

&lt;211&gt; 238

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (107)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

4783

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (113)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5373

Glu	Lys	Leu	Ile	Leu	Leu	Leu	Ser	Leu	Pro	Gly	Ile	Asp	Ile	Asn	Xaa
1				5					10					15	

Lys	Asp	Asn	Ala	Gly	Trp	Thr	Pro	Leu	His	Glu	Ala	Cys	Asn	Tyr	Gly
			20					25					30		

Asn	Thr	Val	Cys	Val	Gln	Glu	Ile	Leu	Gln	Arg	Cys	Pro	Glu	Val	Asp
		35					40					45			

Leu	Leu	Thr	Gln	Val	Asp	Gly	Val	Thr	Pro	Leu	His	Asp	Ala	Leu	Ser
	50					55					60				

Asn	Gly	His	Val	Glu	Ile	Gly	Lys	Leu	Leu	Leu	Gln	His	Gly	Gly	Pro
65					70					75					80

Val	Leu	Leu	Gln	Gln	Arg	Asn	Ala	Lys	Gly	Glu	Leu	Pro	Leu	Asp	Tyr
			85						90					95	

Val	Val	Ser	Pro	Gln	Ile	Lys	Glu	Glu	Leu	Xaa	Ala	Ile	Thr	Lys	Ile
			100						105					110	

Xaa	Asp	Thr	Val	Glu	Asn	Phe	His	Ala	Gln	Ala	Glu	Lys	His	Phe	His
		115					120					125			

Tyr	Gln	Gln	Leu	Glu	Phe	Gly	Ser	Phe	Leu	Leu	Ser	Arg	Met	Leu	Leu
	130					135					140				

Asn	Phe	Cys	Ser	Ile	Phe	Asp	Leu	Ser	Ser	Glu	Phe	Ile	Leu	Ala	Ser
145					150					155					160

Lys	Gly	Leu	Thr	His	Leu	Asn	Glu	Leu	Leu	Met	Ala	Cys	Lys	Ser	His
				165				170						175	

Lys	Glu	Thr	Thr	Ser	Val	His	Thr	Asp	Trp	Leu	Leu	Asp	Leu	Tyr	Ala
			180					185					190		

Gly	Asn	Ile	Lys	Thr	Leu	Gln	Lys	Leu	Pro	His	Ile	Leu	Lys	Glu	Leu
		195					200					205			

Pro	Glu	Asn	Leu	Lys	Val	Cys	Pro	Gly	Val	His	Thr	Glu	Ala	Leu	Met
	210					215					220				

Ile	Thr	Leu	Glu	Met	Met	Cys	Arg	Ser	Val	Met	Glu	Phe	Ser		
225					230					235					

4784

&lt;210&gt; 5374

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5374

Ile Lys Asp Cys Leu Lys Thr Lys Gly Asn Leu Thr Asp Glu Lys Lys  
 1 5 10 15

Pro Asp Glu Arg His Leu Thr Lys Asn Glu Lys Lys Leu Ser Gly Gln  
 20 25 30

Asn Asn Tyr Glu Lys Met Asn Leu Gln Ile Arg Lys Arg Glu Lys Ser  
 35 40 45

Leu Phe Asp Thr Met Gly Thr Gln Lys Arg Val Asn Thr Asn Val Lys  
 50 55 60

Ile Pro Arg Val Lys Lys Ser Ile Ile Thr Thr Phe Arg Ala  
 65 70 75

&lt;210&gt; 5375

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (54)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5375

Phe Gly Arg Ala Val Thr Gln Ala Gly Val Leu Trp His Asn Leu Gly  
 1 5 10 15

Leu Leu Gln Pro Gln Phe Leu Gly Leu Asn Ser Pro Pro Thr Ser Ala  
 20 25 30

Ser Trp Val Ala Gly Thr Thr Val Thr Ala Leu Pro Cys Pro Asp Asn  
 35 40 45

Phe Phe Phe Phe Phe Xaa  
 50

## 4785

&lt;210&gt; 5376

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (50)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5376

His Phe Thr Val Leu Phe Gly Ile Ile Leu Tyr Glu Ala Val Trp Ile  
1 5 10 15

Gly Leu Leu Phe Pro Leu Val Asn Trp Leu Met Leu Arg Phe Trp Leu  
20 25 30

Leu Glu Ser Ile Cys Val Phe Pro Val Leu Ala Ser His Tyr Val Ile  
35 40 45

Cys Xaa Ile Phe  
50

&lt;210&gt; 5377

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5377

Met Arg Leu Lys Ser Val Cys Val Cys Xaa Arg Ala Arg Met Trp Pro  
1 5 10 15

Lys Asn Ser Ala Ile Met Ser Asn Ser Ser Phe Ala Leu Phe Leu Arg  
20 25 30

Val Asp Asp Ile Arg His Phe Ser Val Phe Gly Glu Ile Asp Trp Asp  
35 40 45

Thr Ser Pro Lys Pro Thr Gln Val Cys Asn Trp Lys Pro Gly Gly Trp  
50 55 60

Phe Ser Gly Pro Leu Cys Pro Leu Ser Phe Thr Val Ile Leu Phe Thr  
65 70 75 80

4786

Ser Thr

&lt;210&gt; 5378

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5378

Thr Asn Ser Xaa Phe Asp Lys Gln Asn Asp Asp Pro Lys Glu Arg Ile  
 1 5 10 15

Asp Lys Asp Thr Lys Asn Val Asn Ser Asn Thr Gly Met Gln Thr Thr  
 20 25 30

Glu Asn Tyr Leu Thr Glu Lys Gly Asn Glu Arg Asn Val Lys Phe Pro  
 35 40 45

Pro Glu His Pro Val Glu Asn Asp Val Thr Gln Thr Val Ser Ser Phe  
 50 55 60

Ser Leu Pro Ala Ser Ser Arg Ser Lys Lys Leu Cys Asp Val Thr Thr  
 65 70 75 80

Gly Leu Lys Ile His Val Ser Ile Pro Asn Arg Ile Pro Lys Ile Val  
 85 90 95

Lys Glu Gly Glu Asp Asp Tyr Tyr Thr Asp Gly Glu Glu Ser Ser Asp  
 100 105 110

Asp Gly Lys Lys Tyr His Val Lys Ser Lys Ser Ala Lys Pro Ser Thr  
 115 120 125

Asn Val Lys Lys Ser Ile Arg Lys Lys Tyr Cys Lys Val Ser Ser Ser  
 130 135 140

Ser Ser Ser Ser Leu Ser Ser Ser Ser Ser Gly Ser Gly Thr Asp Cys  
 145 150 155 160

Leu Asp Ala Gly Ser Asp Ser His Leu Ser Asp Ser Ser Pro Ser Ser  
 165 170 175

Lys Ser Ser Lys Lys His Val Ser Gly Ile Thr Leu Leu Ser Pro Lys  
 180 185 190



4787

His Lys Tyr Lys Ser Gly Ile Lys Ser Thr Glu Thr Gln Pro Ser Ser  
 195 200 205  
 Thr Thr Pro Lys Cys Gly His Tyr Pro Glu Glu Ser Glu Asp Thr Val  
 210 215 220  
 Thr Asp Val Ser Pro Leu Ser Thr Pro Asp Ile Ser Pro Leu Gln Ser  
 225 230 235 240  
 Phe Glu Leu Gly Ile Ala Asn Asp Gln Lys Val Lys Ile Lys Lys Gln  
 245 250 255  
 Glu Asn Val Ser Gln Glu Ile Tyr Glu Asp Val Glu Asp Leu Lys Asn  
 260 265 270  
 Asn Ser Lys Tyr Leu Lys Ala Ala Lys Lys Gly Glu Glu Asn Leu Gly  
 275 280 285  
 Leu Leu  
 290

<210> 5379  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<400> 5379  
 Pro Lys Thr Ala Phe Asp Ser Cys Ser Pro Thr Cys Ser Ser Pro Ser  
 1 5 10 15  
 Phe Leu His Leu Arg Asn Val Thr Ser Ser Ala Lys Ser Phe Pro Asp  
 20 25 30  
 Leu Ser Lys Ile Ile Thr Ser Ser Val Cys Cys Gly Asn Leu Tyr Arg  
 35 40 45  
 Met Val Gly Lys Phe Gln Val Ser Tyr Leu Asp  
 50 55

<210> 5380  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

<400> 5380  
 Lys Leu Leu Leu Phe Ser Leu Ser Ile Leu Leu Phe Phe Gly Lys Gln

4788

1                      5                      10                      15  
 Ser Leu Ser Pro Val Met Gly Gly Gly Trp Glu Arg Leu His Ser  
                     20                      25                      30  
 Thr Pro Trp Lys Trp Glu Tyr Pro Tyr Val Val Phe Gly Ile Phe Leu  
                     35                      40                      45  
 Tyr Gly Lys Phe Val Ser Pro Ser His Pro Asn Leu Phe Thr Ser Val  
                     50                      55                      60  
 Trp Thr His Val Tyr Phe Val Phe Trp Val Thr Gln Tyr Leu Phe Cys  
                     65                      70                      75                      80  
 Cys Leu Ser Cys Pro Ala Trp Leu Leu Gly Val Leu Pro Gly Trp Leu  
                     85                      90                      95  
 Leu Cys Pro Phe Asp Val Pro Ile Leu Leu Ile Phe Glu His Phe Leu  
                     100                      105                      110  
 Leu Ser Gly Thr Thr Arg Cys Ser Arg Phe Ile Leu Asp Ile Pro Cys  
                     115                      120                      125  
 Pro Asn Pro Arg Ile Pro Arg Ile Asn Pro Cys Ser Lys Glu Pro Trp  
                     130                      135                      140  
 Phe Leu Leu Leu Glu Asn His Thr  
                     145                      150

&lt;210&gt; 5381

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (62)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5381

Phe Leu Cys Ser Val Val Tyr Phe Phe Phe Leu Leu Leu Leu Ser Pro  
 1                      5                      10                      15  
 Leu Ser Pro Leu Lys Ala Gly Asn Arg Leu Leu Glu Asn Leu Arg Gly  
                     20                      25                      30  
 Lys Arg Ile Leu Phe Thr Gly Gly Ser Arg Lys Leu Ser Glu Arg Ser  
                     35                      40                      45

4789

Ile Val Leu Ser Pro Phe Pro Leu Ser Phe Gln Phe Gly Xaa Trp Trp  
 50 55 60

Ser Glu Glu Glu Lys Glu Ile Leu Cys Met Tyr Val  
 65 70 75

&lt;210&gt; 5382

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5382

Gly Asp Asp Phe Gly Arg Asn Pro Phe Gly Thr Thr His Pro Ala Met  
 1 5 10 15

Ser Val Glu Lys Trp Asn Cys Asn Pro Gln Glu Ser His Phe Ile Phe  
 20 25 30

Leu Pro Phe Lys Trp Leu Ile Lys Gly Ser Ala Ser Ser Thr Gly Phe  
 35 40 45

Met Glu  
 50

&lt;210&gt; 5383

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5383

Asn Ala His Ala Gly Arg Tyr Cys Ser Tyr Gln Tyr Phe Ala Phe Tyr  
 1 5 10 15

Asn Lys Gly Leu Phe Ile Leu Met Pro Phe Leu Gln Asp Phe Phe Val  
 20 25 30

Ile Ser Val His Met Lys Met Leu Thr Leu Asn Ile Asn Thr Trp Arg  
 35 40 45

Pro Cys Pro Val Ala Leu Pro Trp Leu Pro Ala Trp Ser Val Phe Pro  
 50 55 60

Cys Gly Phe Thr Cys Gly Pro Ala Val Ala Thr Ser Met Val Cys Val  
 65 70 75 80

Leu Val Asp Ser Leu Gln Leu Ser Asp Ala Ser Phe Cys His Asn His  
 85 90 95

## 4790

Leu Phe Pro Asp Thr Ile Val Leu Ile Leu Phe Gln Asn Cys Lys Ile  
                   100                  105                  110

Ile Ser Ser Leu Lys Cys Lys Gly Cys Phe Cys Ser Val Ser Val Phe  
                   115                  120                  125

Phe Glu Ile Lys Leu  
                   130

&lt;210&gt; 5384

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5384

Tyr Leu Phe Ser Leu Leu Phe Met Ser Leu Cys Arg Ile Leu Gly Tyr  
   1                  5                  10                  15

Ser Phe Ser Ser Arg Leu Ser Ser Leu Ile Leu Pro Leu Ala Val Phe  
                   20                  25                  30

His Tyr Cys Leu Ser Cys Pro Leu His Phe Lys Leu Ser Phe Lys Tyr  
           35                  40                  45

Leu Pro Phe Pro Ser Phe Pro Phe Ser Ser Leu Pro Cys Pro Ala Leu  
   50                  55                  60

Pro Cys Pro Ala Leu Pro Ser Pro Pro Leu  
   65                  70

&lt;210&gt; 5385

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (59)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

## 4791

&lt;221&gt; SITE

&lt;222&gt; (70)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5385

Ile	Phe	Asp	Phe	Phe	His	Gln	Arg	Phe	Cys	Phe	Pro	Ala	Ile	Asp	Phe
1				5					10					15	

Ala	Tyr	Leu	Leu	Leu	Asp	Leu	Tyr	Leu	Lys	Val	Leu	Ser	Phe	Trp	Asn
		20						25					30		

Val	Cys	Phe	Cys	Thr	Cys	Phe	Ala	Asn	Xaa	Phe	Leu	Asn	Ser	Lys	Phe
		35					40					45			

Tyr	Cys	Leu	Ala	Tyr	Asn	Asn	Leu	Asn	Phe	Xaa	Tyr	Ile	Asn	Pro	Gly
	50					55					60				

Glu	Lys	Glu	Pro	Lys	Xaa	Thr
65					70	

&lt;210&gt; 5386

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5386

Leu	Ala	Asn	Cys	Ala	Phe	Lys	Lys	Lys	Asn	Arg	Gln	Thr	Phe	Glu	Gly
1				5					10					15	

Gln	Glu	Gly	Ser	Cys	Pro	Val	Phe	Gln	Lys	Ser	Phe	Phe	Pro	Ala	Ile
			20					25					30		

Arg	Asn	Val	Lys	Pro	Asn	Leu	Ala	Thr	Lys	Ile	Asn	Glu	Lys	Met	Gly
		35					40					45			

Phe	Pro	Leu	Val	Leu	Ser	Leu	Ser	Cys	Ser	Trp	Leu	Cys	Tyr	Val	Leu
	50					55					60				

Ser	Pro	Arg	Leu	Tyr	Pro	Asp	Lys	Met	Ser
65					70				

&lt;210&gt; 5387

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5387

## 4792

Gly Lys Arg His Ile Phe Ser Leu Thr Gln Leu Ala Asp Thr Glu Val  
 1 5 10 15

Gly Arg Trp Gln Glu Lys Ala Ser Thr Glu Leu Ile Gln Thr Cys Arg  
 20 25 30

Lys Leu Pro Leu Leu Leu Leu Ser Lys Met Lys Gly Ser Gly Lys Arg  
 35 40 45

His Leu Pro Phe Pro Ala Leu Arg Ile Leu Ala Ser Leu Ser Leu Tyr  
 50 55 60

<210> 5388

<211> 220

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (156)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (169)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (220)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5388

Tyr Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly  
 1 5 10 15

Ser Thr His Ala Ser Ala Asn Ser Phe Val Lys Phe Ala Asn Ile Glu  
 20 25 30

Glu Asp Thr Pro Ser Tyr His Arg Arg Tyr Asp Phe Phe Val Ser Arg  
 35 40 45

Phe Ser Ala Met Cys His Ser Cys His Ser Asp Pro Glu Ile Arg Thr  
 50 55 60

Glu Ile Arg Ile Ala Gly Ile Arg Gly Ile Gln Gly Val Val Arg Lys

## 4793

65		70		75		80
Thr Val Asn Asp	Glu Leu Arg Ala Thr Ile Trp Glu Pro Gln His Met					
	85		90		95	
Asp Lys Ile Val Pro Ser Leu Leu Phe Asn Met Gln Lys Ile Glu Glu						
	100		105		110	
Val Asp Ser Arg Ile Gly Pro Pro Ser Ser Pro Ser Ala Thr Asp Lys						
	115		120		125	
Glu Glu Asn Pro Ala Val Leu Ala Glu Asn Cys Phe Arg Glu Leu Leu						
	130		135		140	
Gly Arg Ala Thr Phe Gly Asn Met Asn Asn Ala Xaa Arg Pro Val Phe						
	145		150		155	160
Ala His Leu Asp His His Lys Leu Xaa Asp Pro Asn Glu Phe Ala Val						
	165		170		175	
His Cys Phe Lys Ile Ile Met Tyr Ser Ile Gln Ala Gln Tyr Ser His						
	180		185		190	
His Val Ile Gln Glu Ile Leu Gly His Leu Asp Ala Arg Lys Lys Asp						
	195		200		205	
Ala Pro Gly Phe Glu Gln Val Leu Phe Arg Phe Xaa						
	210		215		220	

&lt;210&gt; 5389

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (18)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

4794

<220>  
 <221> SITE  
 <222> (45)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (54)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (64)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5389  
 Leu Cys Val Arg Cys Ser Lys Lys Val Ala Gln Ser Val Met Arg Lys  
     1                    5                    10                    15  
 Leu Xaa Gly Tyr Ile Leu Ser Arg Met Asn Arg Gln Asp Ser Leu Lys  
                     20                    25                    30  
 Asn Phe Leu Gly Asn Glu Lys Xaa Ala Xaa Cys Asn Xaa Phe Met Pro  
             35                    40                    45  
 Ile Ile Pro Asn Thr Xaa Gly Gly Leu Lys Gly Glu Asp His Phe Xaa  
     50                    55                    60  
 Pro  
   65

<210> 5390  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<400> 5390  
 Ile Cys Glu Ile Leu Ser Leu Cys Pro Phe Pro Thr Ser Gly Pro Thr  
     1                    5                    10                    15  
 Pro Gly Pro Ser Pro Thr Phe Leu Leu Ser Ser Leu Ala Val Val Ile  
             20                    25                    30  
 Ile Trp Gly Leu Tyr Cys Thr Tyr Pro Gly Cys Val Cys Val Gly Trp  
             35                    40                    45  
 Gly Gln Pro Phe Cys Thr Glu Leu Pro Gly Pro Leu Pro Pro Arg Pro  
     50                    55                    60



## 4795

Ser Ala Ser Leu Pro Thr His His Leu Lys Gly Arg Glu Leu Leu Phe  
 65 70 75 80

Leu Pro Val Leu Phe Cys Phe Leu Val Leu Pro Pro His Pro Thr Pro  
 85 90 95

Ser Leu Ile Tyr Pro Pro Ser Leu Ser Pro Phe Leu His Ser Gln Pro  
 100 105 110

His Phe Leu Phe Phe Trp Ser Val Trp  
 115 120

<210> 5391

<211> 49

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5391

Phe Thr Asn Trp Arg Leu Leu Ile Leu Ile His Leu Arg Phe Lys Ile  
 1 5 10 15

Phe Ile Asn Cys Lys Gln Cys Asn Tyr Leu Tyr Phe Thr Val Pro Ser  
 20 25 30

Gln Thr Phe His Leu Arg Phe Cys Cys Lys Lys His Gln Val Ser Xaa  
 35 40 45

Thr

<210> 5392

<211> 78

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5392

Leu Leu Ala Ala Gly Ile Ser Glu Glu Gly Leu Val Leu Ile Leu Lys

4796

1                      5                      10                      15  
 Val Leu Cys Ser Cys Pro Arg Pro Glu Xaa Thr His Ala Glu Thr Leu  
                          20                                      25                                      30  
 Pro Ser Pro Ser Lys Val Gln Gly Leu Val Thr Glu Tyr Trp Val Glu  
                          35                                      40                                      45  
 His Met Thr Gly Ser Gln Leu Ile Pro Pro Ser Leu Pro Val Lys Pro  
                          50                                      55                                      60  
 Gln Asp Ser Cys Phe Pro Gly Ser His Leu Arg Pro Leu Arg  
                          65                                      70                                      75

&lt;210&gt; 5393

&lt;211&gt; 49

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (17)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5393

Val Leu His His Val Leu Ile His Leu Ile Leu Thr Glu Ile Val Asn  
   1                                      5                                      10                                      15  
 Xaa Gly Ile Ile Leu Ile Leu Thr Leu Trp Ile Lys Lys Thr Lys Ala  
                          20                                      25                                      30  
 Gln Arg Val Lys Ala Ser Leu Pro Glu Ile Ile Asp Cys Lys Phe Glu  
                          35                                      40                                      45

Arg

&lt;210&gt; 5394

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5394

Ile Leu Thr Pro Pro Leu Cys Asp Ile Gln Lys Leu Asn Ser Lys Cys  
   1                                      5                                      10                                      15

Asn Lys His Leu Asn Ile Arg Ile Lys Thr Ile Lys Leu

4797

20

25

&lt;210&gt; 5395

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (168)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (180)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5395

Ala	Glu	Ala	Glu	Phe	Ala	Met	Asp	Ser	Asn	His	Gln	Ser	Asn	Tyr	Lys
1				5					10					15	

Leu	Ser	Lys	Thr	Glu	Lys	Lys	Phe	Leu	Arg	Lys	Gln	Ile	Lys	Ala	Lys
			20					25					30		

His	Thr	Leu	Leu	Arg	His	Glu	Gly	Ile	Glu	Thr	Val	Ser	Tyr	Ala	Thr
		35					40					45			

Gln	Ser	Leu	Val	Val	Ala	Asn	Gly	Gly	Leu	Gly	Asn	Gly	Val	Ser	Arg
	50					55					60				

Asn	Gln	Leu	Leu	Pro	Val	Leu	Glu	Lys	Cys	Gly	Leu	Val	Asp	Ala	Leu
65					70					75					80

Leu	Met	Pro	Pro	Asn	Lys	Pro	Tyr	Ser	Phe	Ala	Arg	Tyr	Arg	Thr	Thr
				85					90					95	

Glu	Glu	Ser	Lys	Arg	Ala	Tyr	Val	Thr	Leu	Asn	Gly	Lys	Glu	Val	Val
			100					105					110		

Asp	Asp	Leu	Gly	Gln	Lys	Ile	Thr	Leu	Tyr	Leu	Asn	Phe	Val	Glu	Lys
		115					120					125			

Val	Gln	Trp	Lys	Glu	Leu	Arg	Pro	Gln	Ala	Leu	Pro	Pro	Gly	Leu	Met
		130				135					140				

Val	Val	Glu	Glu	Ile	Ile	Ser	Ser	Glu	Glu	Glu	Lys	Met	Leu	Leu	Glu
145					150					155					160

Ser	Val	Asp	Trp	Thr	Glu	Asp	Xaa	Asp	His	Gln	Asn	Ser	Gln	Lys	Ile
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

4798

165

170

175

Leu Lys Thr Xaa Lys Ser Lys Ala Phe Trp Leu  
 180 185

&lt;210&gt; 5396

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (58)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5396

Phe Phe Pro Phe Gly Asn Ser Val Asn Pro Ala Val Gly Cys Cys Leu  
 1 5 10 15

Ser Asp Tyr Lys Arg Leu Gly Ser Cys Phe Cys Phe Lys Cys Leu Arg  
 20 25 30

Leu Trp Ser Tyr Thr Leu Val Leu Leu Gly Gln Ser Glu His Cys Leu  
 35 40 45

Leu Cys Lys Ile Ile Ser Phe Arg Val Xaa Ser Cys Gln Ile Tyr Trp  
 50 55 60

Pro Leu Ile Gln Tyr Ser Trp Val Tyr Cys Met  
 65 70 75

&lt;210&gt; 5397

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

4799

&lt;221&gt; SITE

&lt;222&gt; (50)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5397

Glu Asp Gln Glu Lys Lys Glu Leu Lys Met Glu Lys Ala Thr Val Arg  
 1 5 10 15

Thr Val Gly Tyr Arg Arg Arg Asn Ser Gly Ser Thr Xaa Asp Pro Pro  
 20 25 30

Pro Gly Xaa Met Ser Phe Gln Glu Trp Asn Pro Ser Leu Val Met Val  
 35 40 45

Ser Xaa Pro Val Leu Pro Ala Ser Thr Leu Pro Cys Pro Pro Arg Gly  
 50 55 60

Val Ser Glu Ser Ala Ser Gly Phe Leu Met Met Val Val Val Val Val  
 65 70 75 80

Val

&lt;210&gt; 5398

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5398

Tyr Phe Val His His Asn Phe Cys Ile Tyr Phe Phe Lys Tyr Cys Ile  
 1 5 10 15

Lys Ile Ser Phe Ser Leu Ile Ile Glu Phe Phe Gly Leu Arg Phe Phe  
 20 25 30

Val Ala Ser Phe Phe Phe Ser Phe Phe Pro Pro Leu Phe Phe Gly Cys  
 35 40 45

Pro Leu Lys Phe Cys Pro Lys Ala Gly Thr Ser Leu Ile Ser Ser Leu  
 50 55 60

Ala Gln Pro Cys Trp Leu Val Phe Ser Ile Tyr Phe Ser Lys Ile Phe  
 65 70 75 80

Val Ser Val

4800

&lt;210&gt; 5399

&lt;211&gt; 227

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5399

Phe Ile Leu Arg Arg Leu Thr Met Asn Glu Leu Asn Ser Val Ser Asp  
 1 5 10 15

Leu Asp Arg Cys His Leu Tyr Leu Met Val Leu Thr Glu Leu Ile Asn  
 20 25 30

Leu His Leu Lys Val Gly Trp Lys Arg Gly Asn Pro Ile Trp Arg Val  
 35 40 45

Ile Ser Leu Leu Lys Asn Ala Ser Ile Gln His Leu Gln Glu Met Asp  
 50 55 60

Ser Gly Gln Glu Pro Thr Val Gly Ser Gln Ile Gln Arg Val Val Ser  
 65 70 75 80

Met Ala Ala Leu Ala Met Val Cys Glu Ala Ile Asp Gln Lys Pro Glu  
 85 90 95

Leu Gln Leu Asp Ser Leu His Ala Gly Pro Leu Glu Ser Phe Leu Ser  
 100 105 110

Ser Leu Gln Leu Asn Gln Thr Leu Gln Lys Pro His Ala Glu Glu Gln  
 115 120 125

Ser Ser Tyr Ala His Pro Leu Glu Cys Ser Ser Val Leu Glu Glu Ser  
 130 135 140

Ser Ser Ser Gln Gly Trp Gly Lys Ile Val Ala Gln Tyr Ile His Asp  
 145 150 155 160

Gln Trp Val Cys Leu Ser Phe Leu Leu Lys Lys Tyr His Thr Leu Ile  
 165 170 175

Pro Thr Thr Gly Ser Glu Ile Leu Glu Pro Phe Leu Pro Ala Val Gln  
 180 185 190

Met Pro Ile Arg Thr Leu Gln Ser Ala Leu Glu Ala Leu Thr Val Leu  
 195 200 205

Ser Ser Asp Gln Val Leu Pro Val Phe His Cys Leu Lys Val Leu Val  
 210 215 220

Pro Asn Phe  
 225

4801

&lt;210&gt; 5400

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5400

Gln Thr Cys Arg Phe Leu Leu Met Trp Glu Lys Ile Leu Ile Ile Asn  
 1 5 10 15

Asp Ile Lys Val Ile Ile Phe Ser Tyr Val Tyr Arg Tyr Leu Tyr Phe  
 20 25 30

Phe Leu Asn Glu Leu Leu Met Thr Phe Val Tyr Phe Tyr Leu Gly Leu  
 35 40 45

Leu Leu Ser His Leu Phe Leu  
 50 55

&lt;210&gt; 5401

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (17)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (78)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5401

Gln Ala Arg Leu Pro Ser Ala Asn Leu Ser Asn Trp Gly Gly Glu Arg  
 1 5 10 15

Xaa Ser Ser Ser Glu Gly Arg Ala Arg Cys Gln Ile Cys Ser Ser Ala  
 20 25 30

Pro Ala Ser Ala Ala Arg Arg Arg Ala Glu Gly Ala Pro Gly Pro Arg  
 35 40 45

## 4802

Pro Val Thr Gly Arg Ala Gly Ala Pro Ala Val Arg Gly Arg Arg Arg  
50 55 60  
Gly Pro Cys Arg Cys Trp Gly Thr Arg Tyr Arg Pro Cys Xaa Pro Arg  
65 70 75 80  
Pro Pro Pro Xaa Gly Pro Leu Leu Ala Pro  
85 90

<210> 5402  
<211> 48  
<212> PRT  
<213> Homo sapiens

<400> 5402  
Ile Arg His Glu Glu Leu Arg Lys Glu Gly Phe Asp Pro Ala Ile Val  
1 5 10 15  
Lys Asp Pro Leu Phe Tyr Leu Asp Ala Gln Lys Gly Arg Tyr Val Pro  
20 25 30  
Leu Asp Gln Glu Ala Tyr Ser Arg Ile Gln Ala Gly Glu Glu Lys Leu  
35 40 45

<210> 5403  
<211> 100  
<212> PRT  
<213> Homo sapiens

<400> 5403  
Phe Gly Thr Arg Thr Lys Pro Ile Lys Pro Ala Leu Lys Ser Ala Glu  
1 5 10 15  
Val Glu Leu Lys Thr Gly Gly Asn Asn Ser Asn Gln Val Ser Glu Thr  
20 25 30  
Asp Glu Lys Glu Asp Leu Leu His Glu Asn Arg Leu Met Gln Asp Glu  
35 40 45  
Ile Ala Arg Leu Arg Leu Glu Lys Asp Thr Ile Lys Asn Gln Asn Leu  
50 55 60  
Glu Lys Lys Tyr Leu Lys Asp Phe Glu Ile Val Lys Arg Lys His Glu



4803

65                                      70                                      75                                      80

Asp Leu Gln Lys Ala Leu Lys Arg Glu Trp Gly Asn Ile Ser Lys Asn

   85                                      90                                      95

Asp Ser Leu Leu

   100

<210> 5404

<211> 38

<212> PRT

<213> Homo sapiens

<400> 5404

Pro His Arg Thr Ala Phe Ser Cys Phe Ser Asp Thr Leu Met Lys Val

1                                      5                                      10                                      15

Trp Arg Ser Gly Asp Ile Ile Asp Lys Ile Tyr Gln Phe Pro Glu Lys

   20                                      25                                      30

Thr Leu Asp Leu Lys Thr

   35

<210> 5405

<211> 62

<212> PRT

<213> Homo sapiens

<400> 5405

Asp His Thr Gly Gln Arg Gly Leu His Ser His Leu Arg Leu Gln Asp

1                                      5                                      10                                      15

Gly Arg Pro Ala Ala Gly Gly Thr Arg Gly His Arg Ala Pro Leu Pro

   20                                      25                                      30

Leu Val Pro Asn Ser Cys Ser Pro Gly Asp Pro Leu Val Leu Glu Arg

   35                                      40                                      45

Pro Pro Pro Arg Trp Ser Thr Ser Phe Val Pro Leu Val Ser

   50                                      55                                      60

<210> 5406

<211> 183

<212> PRT

<213> Homo sapiens

4804

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (125)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (130)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5406

Leu	Pro	Pro	Gln	Ala	Phe	Asn	His	Ile	Ala	Lys	Leu	Cys	Ser	Leu	Lys
1				5					10					15	

Arg	Leu	Val	Leu	Tyr	Arg	Thr	Lys	Val	Glu	Ile	Glu	Asp	Tyr	Asp	Val
		20						25					30		

Ile	Ala	Ser	Met	Ile	Gly	Ala	Lys	Cys	Lys	Lys	Leu	Arg	Thr	Leu	Asp
	35						40					45			

Leu	Trp	Arg	Cys	Lys	Asn	Ile	Thr	Glu	Asn	Gly	Ile	Ala	Glu	Leu	Ala
	50					55					60				

Ser	Gly	Cys	Pro	Leu	Leu	Glu	Glu	Leu	Asp	Leu	Gly	Trp	Cys	Gln	Leu
65				70						75					80

Cys	Arg	Xaa	His	Arg	Val	Phe	Thr	Arg	Leu	Ala	His	Gln	Leu	Pro	Asn
			85						90					95	

Leu	Gln	Lys	Leu	Phe	Leu	Thr	Ala	Asn	Arg	Ser	Val	Cys	Asp	Thr	Asp
		100						105					110		

Ile	Asp	Glu	Leu	Ala	Cys	Asn	Cys	Thr	Arg	Leu	Gln	Xaa	Leu	Asp	Ile
	115						120					125			

Leu	Xaa	Thr	Arg	Met	Val	Ser	Pro	Ala	Ser	Leu	Arg	Lys	Leu	Leu	Glu
	130					135					140				

Ser	Cys	Lys	Asp	Leu	Ser	Leu	Leu	Asp	Val	Ser	Phe	Cys	Ser	Gln	Ile
145					150					155					160

Asp	Asn	Arg	Ala	Val	Leu	Glu	Leu	Asn	Ala	Ser	Phe	Pro	Lys	Val	Phe
			165						170						175

Ile Lys Lys Ser Phe Thr Gln

4805

180

&lt;210&gt; 5407

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5407

Ser Ser Trp Val Gly Gly Ser Leu Arg Gln Ala Ala Thr Leu Glu Gly  
 1 5 10 15

Glu Gln Gly Ser Ala Val Ser Ala Ala Ser His Ala Arg Ser Asp Leu  
 20 25 30

Ser Leu Gly Thr Pro Gln Glu Pro Glu Asp Ser Ser Gly Gln Cys Arg  
 35 40 45

Trp Gly Val Gly Gly Glu Ser Gly Arg Glu Ala Leu Arg Ala Pro Ser  
 50 55 60

Pro Thr Thr Asn Leu Ala Leu Val Val Ile Phe Arg Gln Asn Phe Val  
 65 70 75 80

Val Phe Phe Pro Phe Tyr Asp Gly Phe  
 85

&lt;210&gt; 5408

&lt;211&gt; 322

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5408

His Ile Xaa Thr His Thr Gly Glu Arg Pro Phe Lys Cys Pro Phe Glu  
 1 5 10 15

Gly Cys Gly Arg Ser Phe Thr Thr Ser Asn Ile Arg Lys Val His Val  
 20 25 30

Arg Thr His Thr Gly Glu Arg Pro Tyr Tyr Cys Thr Glu Pro Gly Cys  
 35 40 45

Gly Arg Ala Phe Ala Ser Ala Thr Asn Tyr Lys Asn His Val Arg Ile

## 4806

50		55		60
His Thr Gly Glu Lys Pro Tyr Val Cys Thr Val Pro Gly Cys Asp Lys				
65		70		75
				80
Arg Phe Thr Glu Tyr Ser Ser Leu Tyr Lys His His Val Val His Thr				
	85		90	95
His Ser Lys Pro Tyr Asn Cys Asn His Cys Gly Lys Thr Tyr Lys Gln				
	100		105	110
Ile Ser Thr Leu Ala Met His Lys Arg Thr Ala His Asn Asp Thr Glu				
	115		120	125
Pro Ile Glu Glu Glu Gln Glu Ala Phe Phe Glu Pro Pro Pro Gly Gln				
	130		135	140
Gly Glu Asp Val Leu Lys Gly Ser Gln Ile Thr Tyr Val Thr Gly Val				
145		150		155
				160
Glu Gly Asp Asp Val Val Ser Thr Gln Val Ala Thr Val Thr Gln Ser				
	165		170	175
Gly Leu Ser Gln Gln Val Thr Leu Ile Ser Gln Asp Gly Thr Gln His				
	180		185	190
Val Asn Ile Ser Gln Ala Asp Met Gln Ala Ile Gly Asn Thr Ile Thr				
	195		200	205
Met Val Thr Gln Asp Gly Thr Pro Ile Thr Val Pro Ala His Asp Ala				
	210		215	220
Val Ile Ser Ser Ala Gly Thr His Ser Val Ala Met Val Thr Ala Glu				
225		230		235
				240
Gly Thr Glu Gly Gln Gln Val Ala Ile Val Ala Gln Asp Leu Ala Ala				
	245		250	255
Phe His Thr Ala Ser Ser Glu Met Gly His Gln Gln His Ser His His				
	260		265	270
Leu Val Thr Thr Glu Thr Arg Pro Leu Thr Leu Val Ala Thr Ser Asn				
	275		280	285
Gly Thr Gln Ile Ala Val Gln Leu Gly Glu Gln Pro Ser Leu Glu Glu				
	290		295	300
Ala Ile Arg Ile Ala Ser Arg Ile Gln Gln Gly Glu Thr Pro Gly Leu				
305		310		315
				320
Asp Asp				

4807

&lt;210&gt; 5409

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5409

Leu Arg Leu Gln Glu Pro Ala Thr Thr His Pro Cys Pro Pro Thr Leu  
1 5 10 15

Gly Leu Ile Phe Val Thr Ser Pro His Tyr Ser Glu Leu Val Arg Pro  
20 25 30

Leu His Phe Cys Phe Thr Gln Leu Thr Trp Phe Ala His Thr Asp Thr  
35 40 45

Asn Lys His Leu Ser Ile Pro Met Ser Leu Leu Ser Ser Lys Asn Thr  
50 55 60

&lt;210&gt; 5410

&lt;211&gt; 27

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5410

Ser Thr His Ala Ser Gly Ser Arg Ser Arg Ala Ala Ala Leu Phe Phe  
1 5 10 15

Phe Phe Lys Arg Phe Cys Thr Gly Lys Lys Lys  
20 25

&lt;210&gt; 5411

&lt;211&gt; 205

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5411

Ala Ala Ala Ala Ala Gly Asp Pro Gly Ala Met Gly Arg Ala Arg Asp  
1 5 10 15

Ala Ile Leu Asp Ala Leu Glu Asn Leu Thr Ala Glu Glu Leu Lys Lys

4808

20 25 30  
 Phe Lys Leu Lys Leu Leu Ser Val Pro Leu Arg Glu Gly Tyr Gly Arg  
 35 40 45  
 Ile Pro Arg Gly Ala Leu Leu Ser Met Asp Ala Leu Asp Leu Thr Asp  
 50 55 60  
 Lys Leu Val Ser Phe Tyr Leu Glu Thr Tyr Gly Ala Glu Leu Thr Ala  
 65 70 75 80  
 Asn Val Leu Arg Asp Met Gly Leu Gln Glu Met Ala Gly Gln Leu Gln  
 85 90 95  
 Ala Ala Thr His Gln Gly Ser Gly Ala Ala Pro Ala Gly Ile Gln Ala  
 100 105 110  
 Pro Pro Gln Ser Ala Ala Lys Pro Gly Leu His Phe Ile Asp Gln His  
 115 120 125  
 Arg Ala Ala Leu Ile Ala Arg Val Thr Asn Val Glu Trp Leu Leu Asp  
 130 135 140  
 Ala Leu Tyr Gly Lys Val Leu Thr Asp Glu Gln Tyr Gln Ala Val Arg  
 145 150 155 160  
 Ala Glu Pro Thr Asn Pro Ser Lys Met Arg Lys Leu Phe Ser Phe Thr  
 165 170 175  
 Pro Ala Trp Asn Trp Thr Cys Lys Asp Leu Leu Leu Gln Ala Leu Arg  
 180 185 190  
 Glu Ser Gln Ser Tyr Leu Val Glu Asp Leu Glu Arg Ser  
 195 200 205

&lt;210&gt; 5412

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5412

Ser Cys Cys Arg Cys Arg Cys Ala Arg Ala Thr Gly Ala Arg Asp Ala  
 1 5 10 15  
 Ile Leu Asp Ala Leu Glu Asn Leu Thr Ala Glu Glu Leu Lys Lys Phe  
 20 25 30  
 Lys Leu Val Ser Phe Tyr Leu Glu Thr Tyr Gly Ala Glu Leu Thr Ala  
 35 40 45

4809

Asn Val Leu Arg Asp Met Gly Leu Gln Glu Met Ala Gly Gln Leu Gln  
 50 55 60

Ala Ala Thr His Gln Gly Ser Gly Ala Ala Pro Ala Gly Ile Gln Ala  
 65 70 75 80

Pro Pro Gln Ser Ala Ala Lys Pro Gly Leu His Phe Ile Asp Gln His  
 85 90 95

Arg Ala Ala Leu Ile Ala Arg Val Thr Asn Val Glu Trp Leu Leu Asp  
 100 105 110

Ala Leu Tyr Gly Lys Val Leu Thr Asp Glu Gln Tyr Gln Ala Val Arg  
 115 120 125

Pro Ser Pro Pro Thr Gln Ala Arg Cys Gly Ser Ser Ser Val Ser His  
 130 135 140

Gln Pro Gly Thr Gly Pro Ala Arg Thr Cys Ser Ser Arg Pro  
 145 150 155

&lt;210&gt; 5413

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5413

Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Lys Lys Lys Gln Met Leu  
 1 5 10 15

Lys Ser Tyr Trp Gln Ser Lys Leu Lys Leu Ala Ala Ile Phe Tyr Ile  
 20 25 30

Ile Ile Ser Ala Asn Pro Ile Phe  
 35 40

&lt;210&gt; 5414

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (67)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

## 4810

&lt;400&gt; 5414

Ser Cys Leu Met Phe Phe Asn Met Pro Ser Tyr Lys Tyr Phe Ile Gln  
 1 5 10 15

Tyr Val Val Phe Val Asn Leu Thr Asn Asp Ile Lys His Lys Leu Gln  
 20 25 30

Cys Arg Gln Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 35 40 45

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 50 55 60

Lys Gly Xaa Pro Phe  
 65

&lt;210&gt; 5415

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5415

Ala His Ala Ser Asp Leu Arg Ala Glu Glu Ile Asp Pro Val Tyr Phe  
 1 5 10 15

Asp Leu His Pro Gly Gln Gly His Thr Lys Pro Glu Tyr Tyr Tyr Pro  
 20 25 30

Asn Phe Leu Pro Ser Pro Phe Ser Ser Trp Asp Leu Arg Asp Met Ala  
 35 40 45

Leu Leu Leu Asn Ala Glu Asn Lys Thr Glu Ala Val Pro Arg Val Gly  
 50 55 60

Gly Leu Leu Gly Lys Tyr Ile Asp Arg Leu Ile Gln Leu Glu Trp Leu  
 65 70 75 80

Gln Val Gln Thr Val Gln Cys Glu Lys Ala Lys Gly Gly Lys Ala Arg  
 85 90 95

Pro Pro Thr Ala Pro Gly Thr Ser Gly Ala Leu Lys Ser Pro Gly Arg  
 100 105 110

Ser Lys Leu Ile Ala Ser Ala Leu Ser Lys Pro Leu Pro His Gln Glu  
 115 120 125

Gly Ala Ser Lys Ser Gly Pro Ser Arg Lys Lys Ala Phe His His Glu  
 130 135 140



## 4811

Glu Ile His Pro Ser His Tyr Ala Phe Glu Thr Ser Pro Arg Pro Ile  
 145 150 155 160

Asp Val Leu Gly Gly Thr Arg Phe Cys Ser Gln Arg Gln Thr Leu Glu  
 165 170 175

Met Arg Thr Glu Glu Lys Lys Lys Lys  
 180 185

<210> 5416

<211> 39

<212> PRT

<213> Homo sapiens

<400> 5416

Cys Tyr Ser Cys Gln Thr Asn Ser Ala Lys Ile Phe Lys Val Thr Arg  
 1 5 10 15

Gly Lys Arg Met Thr Asn Arg Ser Ala Ser Glu Tyr Ile Phe Gln Asn  
 20 25 30

Val Gly Lys Lys Leu Leu Asn  
 35

<210> 5417

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5417

Gly Ile Ser Ser Gly Arg Thr Arg Arg Glu Ser Cys Glu Leu Tyr Cys  
 1 5 10 15

Ile Met Tyr Ile Pro Asp Leu Ile Leu Tyr Arg Thr Phe Tyr Ser Asp  
 20 25 30

Ile Asn Leu Leu His Lys His Phe Ser Asn Asp Thr Lys Ile Thr Asp  
 35 40 45

Lys Ile Tyr Tyr Ile Gln  
 50

<210> 5418

<211> 91

<212> PRT

4812

&lt;213&gt; Homo sapiens

&lt;400&gt; 5418

Val	Pro	Pro	Thr	Pro	Gly	Gln	His	Gln	Asp	Gly	Ser	Ser	Leu	Gly	Ala
1				5				10					15		

Phe	Val	Ser	Pro	Pro	Cys	Leu	Cys	Ser	Glu	Cys	Ala	Pro	His	Phe	Ser
			20					25					30		

Ala	Thr	Leu	Thr	Leu	Ser	Leu	Ile	Trp	Ser	Cys	Leu	Thr	Ser	Leu	Leu
		35					40					45			

Tyr	Ala	Leu	Leu	Leu	Ser	Ile	Ser	Ser	Ala	Leu	Met	Pro	Ala	Gly	Val
	50					55					60				

Met	Pro	Glu	Ile	Ile	Ser	Glu	Lys	Ala	Arg	Gln	Phe	Cys	Val	Cys	Val
65					70					75					80

Cys	Ala	His	Arg	Gly	Val	Leu	Val	Val	Leu	Ile
				85					90	

&lt;210&gt; 5419

&lt;211&gt; 36

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5419

Val	Lys	Asn	Gly	Lys	Gln	Lys	Val	Thr	Ala	Val	Met	Asn	Ile	Leu	Val
1				5				10					15		

Gln	Ile	Leu	Val	Leu	Asn	Leu	Thr	Pro	Glu	Ser	Lys	Ile	Leu	Gly	Ser
		20						25					30		

Leu	Phe	Pro	Val
		35	

&lt;210&gt; 5420

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (52)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

## 4813

&lt;221&gt; SITE

&lt;222&gt; (72)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (96)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5420

Lys Ser Lys Glu Asn Arg Asn Gln Phe Glu Gly Leu Gln Gly Gly Leu  
 1 5 10 15

Leu Ala Gln Leu Ser Ile Asn Thr Tyr Gly Val Ile Ala Val Phe Ser  
 20 25 30

Arg Gly Val Leu Leu Arg Ser Gly Phe Leu Gly Leu His Ala Ala Met  
 35 40 45

Asp Leu Asp Xaa Pro Ser Val Trp Gly Ser Leu Lys Gln Arg Thr Arg  
 50 55 60

Pro Leu Leu Ile Asn Leu Ser Xaa Lys Lys Val Lys Lys Asn Pro Ser  
 65 70 75 80

Lys Pro Pro Asp Leu Arg Ala Arg His His Leu Asp Arg Arg Leu Xaa  
 85 90 95

&lt;210&gt; 5421

&lt;211&gt; 36

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (12)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5421

Gln Asn Ile Ser Ser Xaa Leu Ile Gly Pro Thr Xaa Val Phe Arg Val  
 1 5 10 15

## 4814

Met Lys Leu Arg Phe Phe Cys Val Trp Leu His His Glu Ile Leu Arg  
                   20                  25                  30

Arg Pro Lys Pro  
                   35

<210> 5422  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (1)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (57)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5422  
 Xaa Lys Cys Lys Tyr Lys Thr Phe Gln Ile Lys Ile Glu Tyr Ala His  
       1                  5                  10                  15

Cys Ser Lys Ala Lys Leu Leu Pro Tyr Tyr Ile Tyr Phe Thr Ser Leu  
                   20                  25                  30

Ile Phe Ser Pro Ser Lys Met His Trp Tyr Ser Gly Leu Glu Ser Glu  
                   35                  40                  45

Ser Phe Ala Ile Lys Leu Thr Tyr Xaa Gly Phe Asn Pro Leu Lys Val  
                   50                  55                  60

Gln  
       65

<210> 5423  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 5423  
 Gly Thr Ser Arg Pro Ser His Tyr His Val Leu Trp Asp Asp Asn Cys  
       1                  5                  10                  15

## 4815

Phe Thr Ala Asp Glu Leu Gln Leu Leu Thr Tyr Gln Leu Cys His Thr  
                   20                                  25                                  30  
 Tyr Val Arg Cys Thr Arg Ser Val Ser Ile Pro Ala Pro Ala Tyr Tyr  
                   35                                  40                                  45  
 Ala His Leu Val Ala Phe Arg Ala Arg Tyr His Leu Val Asp Lys Glu  
                   50                                  55                                  60  
 His Asp Arg  
                   65

&lt;210&gt; 5424

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5424

Pro Ile Gly Trp Lys Thr Arg Pro Ile Glu Glu Leu Gly Asn Val Ser  
           1                                  5                                  10                                  15  
 Phe Cys Tyr Phe Cys Tyr Ser Ser Leu Gly Phe Ile Val Ser Phe Phe  
                   20                                  25                                  30  
 Ile Phe Lys Ile Leu Cys Leu Lys Val Phe Leu Leu Asn Tyr Glu Val  
                   35                                  40                                  45  
 Asp Met His Val Tyr Ile Tyr Val Lys Tyr Leu Leu Cys Lys Val Phe  
                   50                                  55                                  60  
 Phe Val Tyr Ser Leu Lys Arg Ser Leu Tyr Leu Asn Lys Ser Glu Gly  
                   65                                  70                                  75                                  80  
 Gln Gln Xaa Lys Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
                                   85                                  90                                  95

4816

<210> 5425  
<211> 25  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (9)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5425  
Arg Thr Pro Val Val Pro Ala Thr Xaa Glu Ala Lys Val Gly Gly Ser  
1 5 10 15

Leu Glu Pro Gly Arg Gln Arg Leu Gln  
20 25

<210> 5426  
<211> 82  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (51)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (60)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (71)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (74)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5426  
Glu Gln Ser Arg Gln Gly Ile Pro Asn Arg Ile Asn Ser Arg Phe Leu  
1 5 10 15

Ile Gln Lys Pro Cys Lys Pro Arg Lys Ala Met Gly Asp Ile Leu Gln

4817

20                      25                      30  
 Asn Ala Glu Ile Lys Thr Val Gln Gln Thr Phe Pro His Pro Gln Gln  
           35                      40                      45  
 Lys Ser Xaa Asn Lys Gly Lys Ser Cys Cys Met Xaa Asn Leu Asn Lys  
           50                      55                      60  
 Ile Gly Phe Pro Ala Gly Xaa Phe Gly Xaa Asn Phe Pro Pro Leu Asn  
           65                      70                      75                      80  
 Val Pro

&lt;210&gt; 5427

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5427

Arg Gly Leu Ala Xaa Lys His Pro Gly Arg Val Gly Gln Ala Ala Leu  
           1                      5                      10                      15  
 Tyr Gly Cys Gly Cys Trp Ala Glu Asn Thr Gly Ala His Asn Pro Tyr  
                           20                      25                      30  
 Ser Thr Ala Val Ser Thr Ser Gly Cys Gly Glu His Leu Val Arg Thr  
           35                      40                      45  
 Ile Leu Ala Arg Glu Cys Ser His Ala Leu Gln Ala Glu Asp Ala His  
           50                      55                      60  
 Gln Ala Leu Leu Glu Thr Met Gln Asn Lys Phe Ile Ser Ser Pro Phe  
           65                      70                      75                      80  
 Leu Ala Ser Glu Asp Gly Val Leu Gly Gly Val Ile Val Leu Arg Ser  
                           85                      90                      95  
 Cys Arg Cys Ser Ala Glu Pro Asp Ser Ser Gln Asn Lys Gln Thr Leu  
           100                      105                      110  
 Leu Val Glu Phe Leu Trp Ser His Thr Thr Glu Ser Met Cys Val Gly  
           115                      120                      125

## 4818

Tyr Met Ser Ala Gln Asp Gly Lys Ala Lys Thr His Ile Ser Arg Leu  
 130 135 140

Pro Pro Gly Ala Val Ala Gly Gln Ser Val Ala Ile Glu Gly Gly Val  
 145 150 155 160

Cys Arg Leu Glu Ser Pro Val Asn  
 165

<210> 5428

<211> 81

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5428

Phe Asn Phe Glu Phe Lys Pro Lys Phe Ile Gly Arg Leu Pro Phe Asp  
 1 5 10 15

Leu Pro Leu Pro Pro His Leu Val Leu Ser Cys Ile Tyr Thr Pro Gly  
 20 25 30

Pro Cys Gly Gly Ala Ala Gly Gly Ser Cys Ala Pro Glu Met Arg Leu  
 35 40 45

Glu Arg Glu Leu Ala Ser Leu Leu Pro Ser Ser Val Ser Lys Glu Pro  
 50 55 60

Arg Pro Ser Gly Pro Ala Ser Xaa Lys Arg Trp Trp Asn Pro Cys Ala  
 65 70 75 80

Gly

<210> 5429

<211> 56

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids



4819

&lt;400&gt; 5429

Tyr Met Leu Gly Glu Lys Ile Tyr Glu Asn Phe Thr Ile Ile Phe Cys  
1 5 10 15

Leu Asp Asn Arg Ser Glu Gly Phe Tyr Pro Thr Trp Lys Val Lys Gly  
20 25 30

Leu Gly Leu Thr Asp Phe Leu Xaa Phe Ser Leu Asp Phe Met Lys Ser  
35 40 45

Met Leu Ser Phe Ser Gln Lys His  
50 55

&lt;210&gt; 5430

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (57)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5430

Gln Cys Arg Glu Val His Leu Glu Lys Arg Arg Gly Glu Gly Leu Gly  
1 5 10 15

Val Ala Leu Val Glu Ser Gly Trp Gly Ser Leu Leu Pro Thr Ala Val  
20 25 30

Ile Ala Asn Leu Leu His Gly Gly Pro Xaa Glu Arg Ser Gly Ala Leu  
35 40 45

Ser Ile Gly Asp Pro Leu Thr Gly Xaa Lys Gly Asp Gln Pro  
50 55 60

&lt;210&gt; 5431

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

## 4820

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (129)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (130)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (132)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5431

Phe	Leu	Gln	His	Trp	Ala	Ile	Arg	Asn	Asn	Phe	Leu	Lys	Ile	Thr	Val
1				5					10					15	

Leu	Tyr	Lys	Tyr	Leu	Lys	Phe	Lys	Tyr	Arg	Lys	Tyr	Leu	Lys	Gln	Lys
		20						25					30		

Ala	Leu	Leu	Xaa	Gly	His	Asp	Thr	Ser	Ala	Leu	Trp	Gln	Cys	Arg	Leu
		35					40					45			

Leu	Arg	Thr	Gln	Pro	Cys	Ser	Pro	Ser	Val	Cys	Ala	Pro	Ser	Leu	Ser
	50					55					60				

Ser	Phe	Ala	Val	Ile	Thr	His	Thr	Gly	Leu	Pro	Val	Trp	Ser	Leu	Glu
65					70					75					80

Lys	Pro	Gly	Phe	Gln	Ser	Thr	Val	Glu	His	Arg	Ile	Leu	Leu	Leu	Val
				85					90					95	

Trp	Met	Phe	Asn	Glu	Leu	Tyr	Phe	Lys	Tyr	Gln	Arg	Leu	Leu	Asn	Lys
			100					105					110		

Asp	Asn	Val	Cys	Phe	Ser	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys
		115					120					125			

Xaa	Xaa	Lys	Xaa	Lys
				130

&lt;210&gt; 5432

4821

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5432

Val	Lys	Gly	Glu	Trp	Ser	Gln	Tyr	Pro	Gln	Lys	Cys	Ser	Lys	Arg	Ser
1				5					10					15	

Asn	Ser	Pro	Leu	Lys	Met	Ser	Leu	Phe	Leu	Ser	Met	Leu	Tyr	Pro	Gly
			20					25					30		

Val	Leu	Val	Glu	Gly	Trp	Gly	Asn	Gln	Lys	Ser	Arg	Phe	Thr	Phe	Asn
		35					40					45			

Ile	Phe	Leu	Asn	Tyr	Ile	His	Phe	Leu	Lys	Arg	Asn	Lys	Lys	Cys	Lys
	50						55				60				

&lt;210&gt; 5433

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (12)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5433

His	Ile	Arg	Asn	Lys	Ile	Leu	Gly	Tyr	Phe	Ile	Xaa	Leu	Ala	Tyr	Phe
1				5					10					15	

Phe	His	Asn	Leu	Arg	Ile	Thr	Val	Phe	Val	Glu	Glu	Ile	Arg	Gln	Ala
			20					25					30		

Asn	Lys	Val	Ala	Lys	Glu	Ala	Ala	Asn	Arg	Trp	Thr	Asp	Asn	Ile	Phe
		35					40					45			

Ala	Ile	Lys	Ser	Trp	Ala	Lys	Arg	Lys	Phe	Gly	Phe	Glu	Glu	Asn	Lys
	50					55					60				

Ile	Asp	Arg	Thr	Phe	Gly	Ile	Pro	Glu	Asp	Phe	Asp	Tyr	Ile	Asp
	65				70					75				

&lt;210&gt; 5434

4822

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5434

Gly Leu Leu Val Gly Val Gly Ala Ala Ala Val Met Pro Gly Ile Val  
 1 5 10 15

Glu Leu Pro Thr Leu Glu Glu Leu Lys Val Asp Glu Val Lys Ile Ser  
 20 25 30

Ser Ala Val Leu Lys Ala Ala Ala His His Tyr Gly Ala Gln Cys Asp  
 35 40 45

Lys Pro Asn Lys Glu Phe Met Leu Cys Arg Trp Glu Glu Lys Asp Pro  
 50 55 60

Arg Arg Cys Leu Glu Glu Gly Lys Leu Val Asn Lys Cys Ala Leu Asp  
 65 70 75 80

Phe Phe Arg Gln Ile Lys Arg His Cys Ala Glu Pro Phe Thr Glu Tyr  
 85 90 95

Trp Thr Cys Ile Asp Tyr Thr Gly Gln Gln Leu Phe Arg His Cys Arg  
 100 105 110

Lys Gln Gln Ala Lys Phe Asp Glu Cys Val Leu Asp Lys Leu Gly Trp  
 115 120 125

Val Arg Pro Asp Leu Gly Glu Leu Ser Lys Val Thr Lys Val Lys Thr  
 130 135 140

Asp Arg Pro Leu Pro Glu Asn Pro Tyr His Ser Arg Pro Arg Pro Asp  
 145 150 155 160

Pro Ser Pro Glu Ile Glu Gly Asp Leu Gln Pro Ala Thr His Gly Ser  
 165 170 175

Arg Phe Tyr Phe Trp Thr Lys  
 180

&lt;210&gt; 5435

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5435

Gly Thr Gly Cys Cys Ala Glu Gly Arg Pro Glu Ser Gln Ser Ile Phe  
 1 5 10 15

4823

Phe Thr Gly Ser Ala Gly Thr Gly Lys Ser Tyr Leu Leu Lys Arg Ile  
                   20                  25                  30

Leu Gly Ser Leu Pro Pro Thr Gly Thr Val Ala Thr Ala Ser Thr Gly  
           35                  40                  45

Val Ala Ala Cys His Ile Gly Gly Thr Thr Leu His Ala Phe Ala Gly  
       50                  55                  60

Lys  
 65

<210> 5436

<211> 48

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5436

His Xaa Thr Leu Thr Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val  
   1                  5                  10                  15

Gln Xaa Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala  
           20                  25                  30

4824

Arg Xaa Arg Glu Leu Val Ser Ser Phe Xaa Phe Xaa Phe Phe His Gly  
           35                          40                          45

&lt;210&gt; 5437

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5437

Glu Leu Trp Ser Pro Cys Leu Val Leu Phe Lys Thr Leu Cys Tyr Thr  
   1                          5                          10                          15

Gly Val Asp Pro Gly Leu Lys Val Ile Gln Phe Trp Gly Leu Ser Leu  
           20                          25                          30

Arg Lys Arg Ile Leu Lys Tyr Leu Thr Phe Ala Asn Ile Xaa Lys Ile  
           35                          40                          45

Tyr Cys His Ile Asn Met Leu Leu Gly Pro Leu Leu Gly Pro  
       50                          55                          60

&lt;210&gt; 5438

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5438

Ser Phe Phe Phe Phe Ser Arg Ser His Val Ser Leu Leu Leu Pro Thr  
   1                          5                          10                          15

Ala Thr Tyr Phe Ile Pro His Gly Ser Arg His Ser Ser Thr Leu Thr  
           20                          25                          30

Asn Phe Leu Thr Pro Ser Ser Phe Leu Glu Ile Ile Ser Ser Pro Cys  
       35                          40                          45

Ala Glu Thr Val Ile Ala Leu Ser Ala Glu Met Ala Val Ser Ser Gln  
       50                          55                          60

## 4825

Gln Gly Glu Ile Met Glu Ser Arg Ile Phe Phe Gln Gly Ser His Ala  
 65 70 75 80  
 His Phe Pro Thr Cys Met Asn Val Asp Thr Ala Ala Thr Val Leu Ala  
 85 90 95  
 Val Asn Val Asn Leu Ala Ser Asn His Cys Ser Gln Gly Asn Val Pro  
 100 105 110  
 Ile Arg Arg Arg Leu Ser Gly Thr Leu Ile Leu Thr Gly Arg Trp Asp  
 115 120 125  
 Ile Leu Arg Asp Pro Glu Ala Gly Cys His Leu Leu Asn Phe Pro Glu  
 130 135 140  
 Gly Cys Leu Gly Ile Cys Phe Leu Phe Ile Leu Glu Leu Phe Phe Leu  
 145 150 155 160  
 Phe Met Gly

&lt;210&gt; 5439

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (62)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (63)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (66)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5439

Gln Gly Ile Leu Tyr Phe His Tyr Asn Gln Ile Ile Glu Ile Thr Cys  
 1 5 10 15

Val Lys Gly Leu Gln Glu Tyr Ile Gln Phe Leu Asn Ile Leu Ile Tyr  
 20 25 30

4826

Leu Leu Ser Asp Asn Leu Ile Leu Leu Asn Tyr His Leu Pro Leu Ser  
35 40 45

Tyr Phe Ile Ile Asn Ser Val Gln Phe Pro Pro Lys Lys Xaa Xaa Tyr  
50 55 60

Leu Xaa Asn Ile  
65

<210> 5440

<211> 170

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (163)

<223> Xaa equals any of the naturally occurring L-amino acids



## 4827

&lt;400&gt; 5440

Val Ile Pro Trp Arg Thr Xaa Ser Ala Asn Xaa Glu Xaa Asp Leu His  
 1 5 10 15  
 Tyr Leu Xaa Leu Xaa Thr Xaa Thr Trp Ser Gly Arg Ile Thr Ile Asn  
 20 25 30  
 Gly Glu Ser Pro Lys His Arg Ser Trp His Thr Leu Thr Pro Ile Ala  
 35 40 45  
 Asp Asp Lys Leu Phe Leu Cys Gly Gly Leu Ser Ala Asp Asn Ile Pro  
 50 55 60  
 Leu Ser Asp Gly Trp Ile His Asn Val Thr Thr Asn Cys Trp Lys Gln  
 65 70 75 80  
 Leu Thr His Leu Pro Lys Thr Arg Pro Arg Leu Trp His Thr Ala Cys  
 85 90 95  
 Leu Gly Lys Glu Asn Glu Ile Met Val Phe Gly Gly Ser Lys Asp Asp  
 100 105 110  
 Leu Leu Ala Leu Asp Thr Gly His Cys Asn Asp Leu Leu Ile Phe Gln  
 115 120 125  
 Thr Gln Pro Tyr Ser Leu Leu Arg Ser Cys Leu Asp Cys Ile Gly Lys  
 130 135 140  
 Asn Ser Ile Met Leu Glu Ser Gln Ile Ser Leu Leu Pro Pro Lys Leu  
 145 150 155 160  
 Leu Gln Xaa Val Leu Lys Lys Lys Lys Lys  
 165 170

&lt;210&gt; 5441

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (111)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (112)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

4828

&lt;400&gt; 5441

```

Ile Gly Ser Val Pro Ala Val Pro Asn Gly Gln Cys Ile Gly Lys His
 1             5             10             15

Lys Lys Cys Asp His Asn Val Asp Cys Ser Asp Lys Ser Asp Glu Leu
      20             25             30

Asp Cys Tyr Pro Thr Glu Glu Pro Ala Pro Gln Ala Thr Asn Thr Val
      35             40             45

Gly Ser Val Ile Gly Val Ile Val Thr Ile Phe Val Ser Gly Thr Val
      50             55             60

Tyr Phe Ile Cys Gln Arg Met Leu Cys Pro Arg Met Lys Gly Asp Gly
      65             70             75             80

Glu Thr Met Thr Asn Asp Tyr Val Val His Gly Pro Ala Ser Val Pro
      85             90             95

Leu Gly Tyr Val Pro His Pro Ser Ser Leu Ser Gly Ser Leu Xaa Xaa
      100             105             110

Met Ser Arg Gly Lys Ser Met Ile
      115             120

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&lt;210&gt; 5442

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5442

```

Asn Met Tyr Lys Asn Gly Tyr Lys Met Val Glu Ala Thr Arg Ser Val
 1             5             10             15

Thr Gly Ile Ile His Ile Asn Thr Thr Lys Ile Gln Phe Asn Ala Lys
      20             25             30

Leu Asn Asp Ile Ile Leu His Gln Asn Leu Phe His Thr Lys Ala His
      35             40             45

Ala Ser Arg Val Ser Ile Arg
      50             55

```

&lt;210&gt; 5443

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

4829

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (105)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5443

Leu	Leu	Lys	Arg	Ser	His	Phe	Asn	Cys	Phe	Cys	Tyr	Ser	Ile	Tyr	Cys
1				5					10					15	

His	Ser	Lys	Tyr	Ile	Leu	Thr	Gln	Asn	Lys	Leu	Asn	Asn	Leu	Cys	Met
			20					25					30		

Phe	Val	Cys	Val	Tyr	Met	His	Thr	Leu	Phe	Tyr	Ile	Lys	Ile	Leu	Arg
		35						40				45			

Leu	Tyr	Ser	His	Cys	Ala	Leu	Trp	Asn	Lys	Ala	Ile	Tyr	Ile	Asn	Val
	50					55					60				

Leu	Tyr	Val	Tyr	Val	Leu	Tyr	Ile	Xaa	Lys	Thr	Phe	His	Leu	Ile	Tyr
65					70					75					80

Ile	Cys	Val	Xaa	Glu	Tyr	Met	Cys	Ala	Cys	Leu	Ala	Asp	Ile	Cys	Ile
				85					90					95	

Lys	Tyr	Lys	His	Ser	Val	Val	Ile	Xaa	Ala	Ile	Cys	Glu	Ile	Val	Asn
			100					105					110		

Phe	Lys	Ile	Thr	Ser	Gly	His	Arg	Leu	Val	Val	Ile	Ile			
		115					120					125			

&lt;210&gt; 5444

&lt;211&gt; 287

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (114)

## 4830

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5444

Gly	Ala	Met	Ala	Pro	Lys	Pro	Gly	Ala	Glu	Trp	Ser	Thr	Ala	Leu	Ser
1				5					10					15	
His	Leu	Val	Leu	Gly	Val	Val	Ser	Leu	His	Ala	Ala	Val	Ser	Thr	Ala
			20					25					30		
Glu	Ala	Ser	Arg	Gly	Ala	Ala	Ala	Gly	Phe	Leu	Leu	Gln	Val	Leu	Ala
		35					40					45			
Ala	Thr	Thr	Thr	Leu	Ala	Pro	Gly	Leu	Ser	Thr	His	Glu	Asp	Cys	Leu
	50					55					60				
Ala	Gly	Ala	Trp	Val	Ala	Thr	Val	Ile	Gly	Leu	Pro	Leu	Leu	Ala	Phe
65					70					75					80
Asp	Phe	His	Trp	Val	Asn	Gly	Asp	Arg	Ser	Ser	Ala	Asn	Leu	Leu	Leu
				85					90					95	
Gly	Gly	Gly	Met	Val	Leu	Ala	Val	Ala	Gly	Gly	His	Leu	Gly	Pro	Glu
			100					105					110		
Ala	Xaa	Cys	Gly	Trp	Ser	Gly	Asn	Ala	Val	Gly	Gly	Arg	Ser	Asp	His
		115					120					125			
Pro	His	Cys	Ser	Cys	Leu	His	Gly	Gln	His	Leu	Trp	Asp	Val	Gly	Gly
	130					135					140				
Gly	Asp	Ala	Gly	Cys	Gly	Arg	Pro	Pro	Glu	Pro	Ala	Gly	Gly	Gly	Gln
145					150					155					160
Ala	Ala	Ala	Ala	Thr	Glu	Gly	Gly	Cys	Leu	Ser	Leu	Gly	Leu	Gly	Cys
				165					170					175	
Arg	Gln	Leu	Gly	Leu	Leu	Pro	Gly	Pro	Ala	Tyr	Thr	Ala	Pro	Pro	Val
			180					185					190		
Gly	Val	Thr	Val	Gly	Tyr	Ser	Gln	Ala	Gly	Phe	Leu	Pro	Cys	Arg	Thr
		195					200					205			
Leu	Ser	Leu	Pro	Pro	Ala	Cys	Ser	Trp	Arg	Leu	Leu	Pro	Arg	Gly	Arg
	210					215					220				
Leu	Phe	Cys	Leu	Leu	Lys	Trp	Val	Cys	Cys	Thr	Leu	Thr	Gly	Gln	Gly
225					230					235					240
Gln	Ser	Leu	Gly	Ala	Val	Leu	Trp	Pro	Arg	Val	Gly	Thr	Cys	Leu	Asp
				245					250					255	

## 4831

Gln Asn Glu Arg Asp Arg Val Pro Asp Thr Phe Gly Gly Pro Asp Ser  
                   260                  265                  270

Gly Leu Asp Thr Val Val Asp Pro Glu Lys Arg Pro Ser Leu Gln  
                   275                  280                  285

<210> 5445

<211> 57

<212> PRT

<213> Homo sapiens

<400> 5445

Ser His Ala Cys Pro Leu Thr Phe Thr Arg Asn Ser Glu Lys Gln Ser  
   1                  5                  10                  15

Thr Tyr Phe Ala Thr Gln Trp Ser Ser Ser Leu Asn Thr Phe Ile Gln  
                   20                  25                  30

Arg Ser Thr Asn Tyr Asp Pro Pro Val Lys Ser Tyr Leu Ala Leu Val  
                   35                  40                  45

Phe Val Asn Lys Val Leu Leu Glu His  
           50                  55

<210> 5446

<211> 100

<212> PRT

<213> Homo sapiens

<400> 5446

Trp Cys Ser Arg Ala Val Pro Pro Pro Ser Leu Leu Pro Ala Ser Thr  
   1                  5                  10                  15

Ser Pro Pro Arg Ser Val Pro Pro Pro Ser Phe Ser Leu Ser Leu Lys  
                   20                  25                  30

Ser Val Ser Phe Gly Ser Pro Arg Ala Ser Leu Pro Arg Pro Ser Trp  
                   35                  40                  45

Met Arg Pro Pro Ser Pro Lys Pro Ala Cys Phe Ala Val Ser Pro Gly  
           50                  55                  60

Ser Trp Lys Leu Ala Gly Ala Arg Gly Trp Arg Gly His Gly Gly Val  
   65                  70                  75                  80

Gly Glu Gly Ser Leu Pro Phe Leu Val Arg Ser Ile Ile Val Asn Gly  
                   85                  90                  95

4832

Cys Thr Leu Phe  
100

&lt;210&gt; 5447

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5447

Arg Ser Trp Gly Ser Xaa Trp Lys Gln Glu Asp Pro Ile Gln Gln Arg  
1 5 10 15

Pro Leu Arg Leu Val Leu His Phe Leu Arg Glu Leu Ser Val Gly Ser  
20 25 30

His His Pro Ala His Trp Leu Pro Pro Lys Pro Pro Pro Leu Thr Ser  
35 40 45

Ala Asn Leu Leu Phe Gly Asp Pro Leu Ser Asp Pro Leu Cys Leu Pro  
50 55 60

Ser Trp Ser Ser Ser Trp Arg Ile Ser Gly Gln Arg Gly Gly Gln Arg  
65 70 75 80

Ser Phe Pro Ile Pro Pro Gln Arg Tyr Phe Leu Leu Gly Pro His Thr  
85 90 95

Leu Thr Pro Ser Ser Glu Met Asn Thr Phe Leu Leu Leu Leu Leu Arg  
100 105 110

Gln Ser Glu Thr Pro Ser  
115

&lt;210&gt; 5448

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5448

Leu Leu Val Ser Asp Leu Thr Leu Leu Ser Lys Tyr Ser Ile Ile Ala  
1 5 10 15

4833

Arg Phe Thr Glu Phe Arg Ser Leu Lys Val Tyr Ile Leu Phe Pro Tyr  
                   20                  25                  30

Val Asp Lys Leu Val Ser Leu Leu Leu Glu Tyr His Lys Val Phe Val  
           35                  40                  45

Lys Ile Thr Gln Val Ile Lys  
       50                  55

&lt;210&gt; 5449

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5449

His Ala Phe Phe Leu Lys Leu Phe Arg Val Val Glu Ile Ala Ala Cys  
       1                  5                  10                  15

His Ser Xaa His Thr Ser Ala Ala Lys Thr Gln Gly Gly His Val Tyr  
           20                  25                  30

Met Trp Gly Gln Cys Arg Gly Gln Ser Val Ile Leu Pro His Leu Thr  
           35                  40                  45

His Phe Ser Cys Thr Asp Asp Val Phe Ala Cys Phe Ala Thr Pro Ala  
       50                  55                  60

Val Ser Trp Arg Leu Leu Ser Val Gly Lys Lys Val Gln Gly His Phe  
       65                  70                  75                  80

Thr Gln Gly Gly Met Val Leu Pro Thr Asp Gln Phe Ser Cys Val Phe  
           85                  90                  95

Ala Gly

&lt;210&gt; 5450

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

4834

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5450

Gly Gly Xaa Asp Gln Gly Gln Glu Pro Gly Pro Leu Glu Glu Gln Gln  
 1 5 10 15

Arg Leu Ala His Leu Glu Asp Lys Leu Arg Leu Leu Ala Gln Ala Arg  
 20 25 30

Asp Glu Ala Gln Gly Ala Cys Leu Gln Gln Lys Gln Val Val Ala Glu  
 35 40 45

Ala Gln Thr Arg Val Ser Gln Leu Gly Leu Gln Val Glu Gly Leu Arg  
 50 55 60

Arg Arg Leu Glu Glu Leu Gln Gln Glu Leu Ser Leu Lys Asp Gln Glu  
 65 70 75 80

Arg Val Ala Glu Val Ser Arg Val Arg Val Glu Leu Gln Glu Gln Asn  
 85 90 95

Gly Arg Leu Gln Ala Glu Leu Ala Ala Gln Glu Ala Leu Arg Glu Lys  
 100 105 110

Ala Ala Ala Leu Glu Arg Gln Leu Lys Val Met Ala Ser Asp His Arg  
 115 120 125

Glu Ala Leu Leu Asp Arg Glu Ser Glu Asn Ala Ser Leu Arg Glu Lys  
 130 135 140

Leu Arg Leu Arg Glu Ala Glu Ile Ala Arg Ile Arg Asp Glu Glu Ala  
 145 150 155 160

Gln Arg Ala Ser Phe Leu Gln Asn Ala Val Leu Ala Tyr Val Gln Ala  
 165 170 175

Ser Pro Val Arg Thr Leu Ser Pro Pro Lys  
 180 185

&lt;210&gt; 5451

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5451

Pro Met Ala Asn Pro Ile Leu Lys Leu Val Asn Ser Asp Gln Ser Tyr



4835

1                      5                      10                      15  
 Phe Thr Tyr Pro Thr Gln Ser Gly Pro Lys Gln Ile Ala Gly Ser Ala  
                          20                      25                      30  
 Ser Lys Pro Thr Phe Leu Pro Lys  
                          35                      40

<210> 5452  
 <211> 69  
 <212> PRT  
 <213> Homo sapiens

<400> 5452  
 Leu Ser Arg Lys Leu Leu Leu Leu Arg Phe Lys Asn Glu Asn Arg Cys  
   1                      5                      10                      15  
 Glu Phe Ser Lys Ile Leu Lys Asn Asn Ser Val Lys Asn Ser Gly Ala  
                          20                      25                      30  
 Val Lys Glu Ser Trp Met Glu Leu Glu Val Thr Ile Leu Ser Asp Ile  
                          35                      40                      45  
 Ser Gln Lys Gln Thr Asn Ile Ala Cys Ser Gln Leu Phe Ala Gly Ser  
                          50                      55                      60  
 Lys Ser Gln Asn Asn  
                          65

<210> 5453  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (115)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (117)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (122)

## 4836

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (123)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (127)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5453

Leu Glu Arg Gly Trp Cys Glu Ser Cys Leu Thr Thr Ala Pro Ser Pro  
1 5 10 15

Pro Cys Ala Ala Glu Gly Thr Pro Ala Ala His Arg Phe Gln Glu Ala  
20 25 30

Leu Ser Asp Phe Trp Leu Ala Leu Glu Gln Leu Arg Gly His Ala Ala  
35 40 45

Ile Asp Tyr Thr Gln Leu Gly Leu Arg Phe Lys Leu Gln Pro Gly Arg  
50 55 60

Cys Tyr Thr Met Trp Arg Arg His Ser Ala Ser Trp Gly Ser Gly Gln  
65 70 75 80

Arg Arg Gln Gln Pro Lys Gly Gly His Val Gln Val Ala Gly Gly Ser  
85 90 95

Leu Asn Gly Leu Asp Ser Ala Leu Asp Gln Val Gln Arg Arg Gly Ser  
100 105 110

Leu Pro Xaa Gly Xaa Ser Pro Gly Arg Xaa Xaa Pro Ala Pro Xaa Trp  
115 120 125

Thr

<210> 5454

<211> 84

<212> PRT

<213> Homo sapiens

<400> 5454

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Ser Gly Asp Lys Leu  
1 5 10 15

## 4837

Lys Leu Asp Gln Thr His Leu Glu Thr Val Ile Pro Ala Pro Gly Lys  
                   20                  25                  30

Arg Ile Leu Val Leu Asn Gly Gly Tyr Arg Gly Asn Glu Gly Thr Leu  
           35                  40                  45

Glu Ser Ile Asn Glu Lys Thr Phe Ser Ala Thr Ile Val Ile Glu Thr  
           50                  55                  60

Gly Pro Leu Lys Gly Arg Arg Val Glu Gly Ile Gln Tyr Glu Asp Ile  
       65                  70                  75                  80

Ser Lys Leu Ala

<210> 5455

<211> 58

<212> PRT

<213> Homo sapiens

<400> 5455

Ile Phe Leu Leu Phe Ser Thr Phe Pro Gln Ile His Val Ser Glu Val  
       1                  5                  10                  15

Leu Ser Phe Gly His His Tyr Leu Ser Thr Leu Arg Asn Met Pro Ile  
           20                  25                  30

Asp Glu Val Asn Ile Leu Gly Ile Gln Arg Ile Tyr Gly Asn Val Asp  
           35                  40                  45

Lys Asp Ile Tyr Gln Asp Lys Ala Leu Glu  
       50                  55

<210> 5456

<211> 46

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

4838

&lt;400&gt; 5456

Glu Thr Thr Lys Gln Thr Gln Lys Lys Glu His Asn Asn Arg Asp Lys  
1 5 10 15

Ile Lys Phe Arg Gln Gln Xaa Thr Glu Xaa Ile Leu Lys Thr Arg Ile  
20 25 30

Cys Ser Leu Arg Ile Phe Phe Ile Ile Lys Met Ile Phe Gly  
35 40 45

&lt;210&gt; 5457

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5457

Asn Pro Phe Ala Ser Gly Gln Phe Gln Thr Arg Ile Leu Ala Cys Pro  
1 5 10 15

Ala Ser His Gly Met Pro Leu Pro Tyr Cys Gln Cys Asp Leu Ser Glu  
20 25 30

Thr Ala Tyr Leu Ile Leu Ser Phe Pro Gly Ala Ala Ser His Leu Pro  
35 40 45

Gln Asp Leu Asn Phe Lys Leu Tyr Ser Ser Pro His Ser Pro Gln Gln  
50 55 60

&lt;210&gt; 5458

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (26)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (55)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

4839

&lt;400&gt; 5458

Val Leu Val Ser Leu Pro Val Pro Thr Gln Ile Ala Ser Gln Asn Phe  
 1 5 10 15

Asp Pro Ala Thr Val Ser Val Ala Thr Xaa His Lys Gly Ala Glu Pro  
 20 25 30

Ser Arg Gly Thr Ala Trp Gly Pro Val Ala Lys Arg Leu Gln Gln Glu  
 35 40 45

Leu Met Thr Leu Met Met Xaa Gly Asp Lys Arg Ile Ser Ala Thr Leu  
 50 55 60

Lys Ala Leu Ser Asn Gly His His Ser  
 65 70

&lt;210&gt; 5459

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5459

Pro Lys Val Leu Gly Leu Gln Ala Glu Pro Pro Arg Pro Ala Leu Leu  
 1 5 10 15

Leu Leu Leu Arg Phe Glu Asn Arg Cys Leu Asn Ala Pro Asp Ser Ala  
 20 25 30

Leu Leu Thr Gln Arg Phe Pro His Leu Ile Tyr Ser Val Pro Ala Gln  
 35 40 45

Ser Pro Phe Ser Leu Met Pro Arg Ala Gly Phe Ser Leu Pro Ala Pro  
 50 55 60

Arg Phe Trp Ser Pro Pro Ser Val Leu Gly Pro Ser Cys Pro Leu Ser  
 65 70 75 80

Gly Phe Arg Pro Ser Gln His Ser Leu Ala Ser Leu Pro  
 85 90

&lt;210&gt; 5460

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5460

Gly Arg Pro Phe Gly Asn Leu Cys Leu Asn Ser Asn Arg Arg Glu Asn

## 4840

1                      5                      10                      15  
 Val Gln Ala Met Gly Leu Leu Pro Ile Ser Leu Cys Phe Ala Ile Pro  
                     20                      25                      30  
 Trp Asp Lys Gly Thr Thr Ser Gly Ser Gln Ser Pro Asn Gln Tyr His  
                     35                      40                      45  
 Arg Val  
                     50

<210> 5461  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 5461  
 Glu Pro Ser Ser Val His Lys Lys Pro Ile Glu Ser Arg Ser His Phe  
   1                      5                      10                      15  
 Ile Arg Trp Gln Val Ser Trp Ala Ser Leu Leu Ala Ser Pro Lys Arg  
                     20                      25                      30  
 Trp Cys Cys Gln Asp Val Leu Glu Val Ile Met Gly His Thr Glu Ala  
                     35                      40                      45  
 Leu Ser Leu His Arg Leu Lys Cys His Gln Asn Trp Pro Leu Pro Asn  
                     50                      55                      60  
 Ile Pro His  
                     65

<210> 5462  
 <211> 62  
 <212> PRT  
 <213> Homo sapiens

<400> 5462  
 Glu Arg Glu Ile Leu Met Ala Pro Met Ala Ala Arg Ile Thr Ser Leu  
   1                      5                      10                      15  
 Lys Phe Arg Ala Cys Val Asn Arg Phe Cys Phe Leu Val Ser Glu Arg  
                     20                      25                      30  
 Phe Ser Tyr Ser Thr Val Leu Ile Cys Phe Ser Lys Pro Ser Asp Leu  
                     35                      40                      45

4841

Cys Ile Phe Asn Arg Pro Gln Asn Asn Val Lys Tyr Met Ala  
 50 55 60

&lt;210&gt; 5463

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5463

Lys Tyr Gln Ile Ile Leu Trp Asn Val Lys Ala Phe Leu Leu Lys Pro  
 1 5 10 15

Ser Ile Cys Phe Ile Val Ile Ser Val Ala Asn Met Asp Phe Ile Phe  
 20 25 30

Lys Met Met Phe Tyr Ile Ile Phe Pro Tyr Lys Leu Phe Glu Lys Gln  
 35 40 45

Phe Asn Asn Ser Met Ile Val Val Ala Pro Leu Asn  
 50 55 60

&lt;210&gt; 5464

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5464

Trp Gln Ser Asn Phe Phe Cys Leu Phe Pro Arg Glu Ser Trp Glu Tyr  
 1 5 10 15

Pro Glu Leu Gly Ala Leu Met Ile Leu Phe Gln Leu Trp Cys Leu Lys  
 20 25 30

Lys Asn Tyr Lys Ser Ile Leu Asn Gly Leu Ser Ser  
 35 40

&lt;210&gt; 5465

&lt;211&gt; 20

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5465

Glu Cys Lys Leu Val Gln Pro Ser Trp Lys Thr Gly Trp Gln Phe Leu  
 1 5 10 15

4842

Lys Asp Leu Cys  
20

<210> 5466  
<211> 58  
<212> PRT  
<213> Homo sapiens

<400> 5466  
Gln Lys Ile Glu Leu Ser Phe Arg Val Ser Lys Lys Val Leu Tyr Ser  
1 5 10 15  
Cys Cys Thr Pro Gly Ser Trp Gln Gly Gly Asp Phe Cys Pro Arg Glu  
20 25 30  
Cys Ser Phe Leu Cys Ile Ile Ala Lys Gln Phe Cys Ser Cys Ile Leu  
35 40 45  
Lys His His Trp Met Asn Phe Phe Pro Leu  
50 55

<210> 5467  
<211> 83  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (7)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (37)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (45)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (47)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>



4843

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5467

Leu Leu Ile Glu Thr Cys Xaa Val Glu Lys Leu Phe Leu Ser Leu Leu  
 1 5 10 15

Ala Ile Gln Val Ser Ser Phe Met Lys Trp Leu Phe Met Ser Phe Ala  
 20 25 30

His Phe Tyr Ile Xaa Leu Phe Phe Phe Pro Ala Xaa Leu Xaa Glu  
 35 40 45

Leu Tyr Ile Leu Ser Ile Leu Ile Ile Tyr Arg Lys Leu Phe Gly Cys  
 50 55 60

His Tyr Leu Leu Leu Val Asn Val Phe Cys Leu Trp Ile Ser Phe Ile  
 65 70 75 80

Ile Tyr Xaa

&lt;210&gt; 5468

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5468

Gln Ala Leu Thr Leu Cys Lys Lys Gly Gly Arg Gly His Ser Trp Ala  
 1 5 10 15

Gly Gly Val Gly Xaa Gln Asp Gly Cys Pro Ser Leu Pro Ile Phe Ser  
 20 25 30

Trp Leu Trp Asp Gln Arg Leu Val Leu Gly Ile Trp Thr Trp Arg Pro  
 35 40 45

Arg Ala Ile Gly Glu Gly Leu Lys Pro Val Leu Ser Ala Ala Cys Cys  
 50 55 60

Glu Trp Pro Ser Arg Val Met Thr Glu Leu Phe Trp Gly Arg Arg  
 65 70 75

4844

<210> 5469  
<211> 245  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (118)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (170)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (171)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (172)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (173)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (177)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5469  
Ala Arg Gly Ala Gly Ala Ala Gly Ser Arg Cys Val Ser Gly Glu Gly  
1 5 10 15

Ala Pro Arg Leu Gly Arg Arg Arg Arg Gln Arg Leu Glu Glu Arg Glu  
20 25 30

Arg Arg Phe Pro Cys Pro Gly Pro Arg Glu Gly Arg Pro Thr Ala Ala  
35 40 45

Met Glu Gln Leu Ser Asp Glu Glu Ile Asp His Gly Ala Glu Glu Asp  
50 55 60

Ser Asp Lys Glu Asp Gln Asp Leu Asp Lys Met Phe Gly Ala Trp Leu

## 4845

65		70		75		80									
Gly	Glu	Leu	Asp	Lys	Leu	Thr	Gln	Ser	Leu	Asp	Ser	Asp	Lys	Pro	Met
				85					90					95	
Glu	Pro	Val	Lys	Arg	Ser	Pro	Leu	Arg	Gln	Glu	Thr	Asn	Met	Ala	Asn
			100					105					110		
Phe	Ser	Tyr	Arg	Phe	Xaa	Ile	Tyr	Asn	Leu	Asn	Glu	Ala	Leu	Asn	Gln
		115					120					125			
Gly	Glu	Thr	Val	Asp	Leu	Asp	Ala	Leu	Met	Ala	Asp	Leu	Cys	Ser	Ile
		130				135					140				
Glu	Gln	Glu	Leu	Ser	Ser	Ile	Gly	Ser	Gly	Asn	Ser	Lys	Arg	Gln	Ile
145					150					155					160
Thr	Glu	Thr	Lys	Ala	Thr	Gln	Lys	Leu	Xaa	Xaa	Xaa	Xaa	His	Thr	Leu
			165						170					175	
Xaa	His	Gly	Thr	Leu	Lys	Gly	Leu	Ser	Ser	Ser	Ser	Asn	Arg	Ile	Ala
		180						185					190		
Lys	Pro	Ser	His	Ala	Ser	Tyr	Ser	Leu	Asp	Asp	Val	Thr	Ala	Gln	Leu
		195					200					205			
Glu	Gln	Ala	Ser	Leu	Ser	Met	Asp	Glu	Ala	Ala	Gln	Gln	Ser	Val	Leu
		210				215					220				
Glu	Asp	Thr	Lys	Pro	Leu	Val	Thr	Asn	Gln	His	Arg	Arg	Thr	Ala	Val
225					230					235					240
Ser	Arg	His	Ser	Glu											
				245											

&lt;210&gt; 5470

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5470

Ala	Phe	Val	Asp	Cys	Glu	His	Pro	Ser	Tyr	Ile	Gly	Leu	Tyr	Arg	Met
1				5					10					15	

Ala	Leu	Ser	Lys	Asn	Tyr	Ser	Cys	Ile	Thr	Val	Val	Phe
			20				25					

4846

<210> 5471  
<211> 81  
<212> PRT  
<213> Homo sapiens

<400> 5471  
Ala Phe Pro Leu Pro Ser Pro Gly Leu Thr Pro His Pro Ile Pro Gln  
1 5 10 15  
Lys Val Arg Arg Ala Gly Cys Val Asp Gly Ile Pro Glu Asn Glu Pro  
20 25 30  
Val Glu Ser Ile Trp Pro Trp His Val Asn Ser Ser Leu Phe Pro Ala  
35 40 45  
Val Ile Thr Thr Leu Phe Phe Pro Gln Gly Leu Asn Cys Thr Val Lys  
50 55 60  
Asn Ser Lys Ser Ser Phe Ser Val Leu Leu Leu Val Ala Phe Leu Ile  
65 70 75 80  
Lys

<210> 5472  
<211> 53  
<212> PRT  
<213> Homo sapiens

<400> 5472  
Ser Cys Ser Phe Gly Val Cys Glu Gln Thr Gln Asp Ile Ile Ile Lys  
1 5 10 15  
His His Pro Ser Ile Lys Gly Leu Phe Tyr Asn Met Cys Cys Glu Ile  
20 25 30  
Asn Leu Ser Gly Lys Val Trp Cys Asn Glu Leu Phe His Ser Met Val  
35 40 45  
Ile Asp Ala Val Lys  
50

<210> 5473  
<211> 105  
<212> PRT  
<213> Homo sapiens

4847

&lt;400&gt; 5473

Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser Thr His Ala Ser  
 1 5 10 15

Val Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Cys Phe Phe Phe  
 20 25 30

Phe Phe Phe Val Val His Asn His Leu Phe Tyr Leu Lys Thr Cys Leu  
 35 40 45

His Cys Ile Glu His Gln His Arg Cys Asp Gln Glu Thr His Ser Pro  
 50 55 60

Val Pro Ala Ala Leu Gly Pro Val Tyr Asp Leu Gly Trp Thr Val Ile  
 65 70 75 80

Phe His Ser Glu Gly Gly Lys Asp Arg Lys Glu Lys Met Ala Ile Ile  
 85 90 95

Pro Thr Pro Val Gln Glu Ser Glu Gln  
 100 105

&lt;210&gt; 5474

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (34)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (50)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (51)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5474

Gly Phe Ile Ile His Cys Gln Met Leu Val Pro Ile Lys Gln Cys Cys

4848

1                      5                      10                      15  
 Leu Pro Thr Pro Thr Phe Cys Val Xaa Gly Lys Phe Trp Lys Ser Arg  
                          20                      25                      30  
 Gly Xaa His Ala Lys Arg Leu Ser Thr Gly Leu Phe Leu Val Ser Ala  
                          35                      40                      45  
 Leu Xaa Xaa Leu Cys Glu Glu Val Ala Ile Tyr Gly Phe Trp Pro Phe  
                          50                      55                      60  
 Ser Val Asn Met His Glu Gln Pro Ile Ser His His Tyr Tyr Asp Asn  
                          65                      70                      75                      80  
 Val Leu Pro Phe Ser Gly Phe His Ala Met Pro Glu Glu Phe Leu Gln  
    85                      90                      95  
 Leu Trp Tyr Leu His Lys Ile Gly Ala Leu Arg Met Gln Leu Asp Pro  
    100                      105                      110  
 Cys Glu Asp Thr Ser Leu Gln Pro Thr Ser  
    115                      120

&lt;210&gt; 5475

&lt;211&gt; 237

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (109)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (237)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5475

Tyr Gln Ser Ile Ala Leu Tyr Phe Glu Gly Glu Lys Arg Tyr Leu Gln  
 1                      5                      10                      15  
 Ala Gly Lys Phe Phe Leu Leu Cys Gly Gln Tyr Ser Arg Ala Leu Lys  
                          20                      25                      30  
 His Phe Leu Lys Cys Pro Ser Ser Glu Asp Asn Val Ala Ile Glu Met  
                          35                      40                      45  
 Ala Ile Glu Thr Val Gly Gln Ala Lys Asp Glu Leu Leu Thr Asn Gln

4849

50		55		60
Leu Ile Asp His Leu Leu Gly Glu Asn Asp Gly Met Pro Lys Asp Ala				
65		70		75 80
Lys Tyr Leu Phe Arg Leu Tyr Met Ala Leu Lys Gln Tyr Arg Glu Ala				
	85		90	95
Ala Gln Thr Ala Ile Ile Ile Ala Arg Glu Glu Gln Xaa Ala Gly Asn				
	100		105	110
Tyr Arg Asn Ala His Asp Val Leu Phe Ser Met Tyr Ala Glu Leu Lys				
	115		120	125
Ser Gln Lys Ile Lys Ile Pro Ser Glu Met Ala Thr Asn Leu Met Ile				
	130		135	140
Leu His Ser Tyr Ile Leu Val Lys Ile His Val Lys Asn Gly Asp His				
	145		150	155 160
Met Lys Gly Ala Arg Met Leu Ile Arg Val Ala Asn Asn Ile Ser Lys				
		165	170	175
Phe Pro Ser His Ile Val Pro Ile Leu Thr Ser Thr Val Ile Glu Cys				
	180		185	190
His Arg Ala Gly Leu Lys Asn Ser Ala Phe Ser Phe Ala Ala Met Leu				
	195		200	205
Met Arg Pro Glu Tyr Arg Ser Lys Ile Asp Ala Lys Tyr Lys Lys Lys				
	210		215	220
Ile Glu Gly Met Val Gln Glu Thr Arg Tyr Ile Leu Xaa				
	225		230	235

&lt;210&gt; 5476

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5476

Gly Gly Ala Gly Ala Arg Gly Gly Gly Ala Leu Trp Val Thr Glu Gly
1 5 10 15

## 4850

Val Lys Xaa Pro Gly Pro Val Ser Gly Gln Cys Arg Lys Ser Gln Pro  
                   20                  25                  30

His Ala Cys Gly Glu Ile Pro Cys Arg Ala Pro Pro Thr Met Asp Thr  
           35                  40                  45

Ser Gly Pro Leu Arg Ser Ser Lys Ala Val Ser Ser Phe Pro Leu Gln  
       50                  55                  60

Gln Arg Gly Val Pro Ser Ser Val Lys Gln Pro Phe Leu Phe Leu Glu  
       65                  70                  75                  80

Ser Tyr Lys Trp Arg Pro Lys Ser Val Pro Met Leu Arg Gln Gly Pro  
                   85                  90                  95

Gly Cys Ser Phe Leu Ser Gly Asn Arg Leu Glu Leu Phe Leu Trp Asp  
           100                  105                  110

Met Pro Pro Arg Pro Ala Leu Lys Gly Cys Ser Ser Leu Thr Thr Trp  
       115                  120                  125

Asn Gln Thr Pro Pro Ser Phe Val Tyr Lys Gly Asn Lys Glu  
       130                  135                  140

&lt;210&gt; 5477

&lt;211&gt; 41

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5477

Gly Arg Lys Leu Pro Glu Glu Glu Gly Gly Lys Glu Ile Lys Asn Thr  
   1                  5                  10                  15

Leu Lys Val Cys Gln Lys Lys Glu Leu Tyr Phe Leu Lys His Ser Arg  
           20                  25                  30

Lys Met Met Ser Phe Gln Leu Leu Ile  
       35                  40

&lt;210&gt; 5478

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5478

Lys Ser Ile Val Val Leu Val Leu Leu Ser Trp Ile Ile Val Gln Lys  
   1                  5                  10                  15



4851

Glu Val Gln Pro Pro Asp Asn His Ile Phe Thr Val Met Asn Gly Lys  
                   20                  25                  30  
 Thr Lys Cys Arg Ala Gln Leu Thr Gln Arg Lys Lys Gly Ser Lys Asp  
                   35                  40                  45  
 Lys Leu Trp His Asn Leu Ala Ala Lys Phe Leu Pro Ser Thr Asp Phe  
                   50                  55                  60

<210> 5479  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<400> 5479  
 Cys Ile Ile Leu Arg Gly Phe Phe Arg Ala Val Leu Thr Glu Leu Ser  
   1                  5                  10                  15  
 Ile Asn Leu His Ser Ser Gly Arg Leu Leu Lys Leu Ala Gly His Asn  
                   20                  25                  30  
 Glu Ile Gly Lys Ser Arg Val Leu Lys Ser Ile Ala Trp Pro Ser Ala  
                   35                  40                  45

<210> 5480  
 <211> 68  
 <212> PRT  
 <213> Homo sapiens

<400> 5480  
 Lys Leu Leu Cys Pro His Leu Arg Glu Glu Gly Ser Ser Asn Asn Thr  
   1                  5                  10                  15  
 Thr Met Cys Lys Ala Gly Ser Glu Ile Leu Leu Ser Pro Leu Pro Ser  
                   20                  25                  30  
 Cys Asn Pro Ser Leu Pro His Leu Ser Cys Met Cys Ile Thr Met Leu  
                   35                  40                  45  
 Phe Cys Phe Leu Met Lys Met Arg Leu Cys Ile Leu Phe Asp Asn Leu

4852

50

55

60

Phe Gln Ile Lys  
65

&lt;210&gt; 5481

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5481

Pro Leu Ser Thr Pro His Pro Leu Arg Arg Gly Pro Arg Ser Tyr Pro  
1 5 10 15

Thr Val His Leu Pro Arg Gly Cys Ser Glu Leu Ala Met Ala Ala Thr  
20 25 30

Ala Ala Thr Ala Ala Asp Pro Arg Ser Gly Ser Leu Arg Arg Gly Val  
35 40 45

Ala Ala Leu Pro Arg Pro Pro Arg Gln Pro Glu Gln Leu Gln Ser Thr  
50 55 60

Gly Leu Gly Ser Glu Thr Phe Lys Val Lys Gln Ala Glu Trp Gly Asp  
65 70 75 80

Arg Thr Ile Ser Pro Pro Pro Gly Ala Pro Gly Leu Ser Leu Gly Gly  
85 90 95

Pro Pro Leu Ala Pro  
100

&lt;210&gt; 5482

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5482

Arg Ile His Glu Lys Tyr Glu Ile Trp Phe His Pro Val Arg His Phe  
1 5 10 15

Asn Arg Glu Asp Gln Asn Val Thr Trp Gln Leu Gly Asn Asn Leu Thr  
20 25 30

Ser Leu Ala Val Gly Leu Asn Phe Leu Ile Ile Asp Pro Gly Ile Phe  
35 40 45

## 4853

Gln Pro Glu Thr Gln Leu Ser Gly Arg Gln Thr Asn Cys Thr Thr Pro  
 50 55 60

Thr Ile Ser Trp Thr Leu Lys Phe Cys Leu Leu Gln Ser Ile Val Ser  
 65 70 75 80

Phe Lys Ala Pro Val Leu Ala  
 85

&lt;210&gt; 5483

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5483

Thr Pro Ile Met Xaa Asp Glu Phe Val Met Arg Asp Asn Leu Glu Val  
 1 5 10 15

Val Phe Thr His Tyr Ala Thr Ile Lys Gly Ser Thr Val Glu Arg Ile  
 20 25 30

Leu Thr His Ser Val Thr Asn Gly Thr His Arg Gln His Glu Phe Ala  
 35 40 45

Pro Tyr Met Thr Glu Val Ile Gln Gly Phe Leu  
 50 55

&lt;210&gt; 5484

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5484

Val Thr Thr Lys Phe Val Arg Thr Ser Thr Asn Lys Val Lys Cys Pro  
 1 5 10 15

Val Phe Val Val Arg His Ser Met Glu Asn Leu Phe Glu Lys Asn Lys  
 20 25 30

Ile Arg Ala Ser Ile Ser Tyr Lys Trp Thr Pro Glu Gly Arg Arg Leu  
 35 40 45

## 4854

Val Thr Gly Ala Ser Ser Gly Glu Phe Thr Leu Trp Asn Gly Leu Thr  
 50 55 60  
 Phe Asn Phe Glu Thr Ile Leu Gln Ala His Asp Ser Pro Val Arg Ala  
 65 70 75 80  
 Met Thr Trp Ser His Asn Asp Met Trp Met Leu Thr Ala Asp His Gly  
 85 90 95  
 Gly Tyr Val Lys Tyr Trp Gln Ser Asn Met Asn Asn Val Lys Met Phe  
 100 105 110  
 Gln Ala His Lys Glu Ala Ile Arg Glu Ala Arg Phe Ile His Asn Ile  
 115 120 125  
 Pro Phe Ser Val Val Pro Ile Val Met Val Lys Leu Phe Ser Lys Cys  
 130 135 140  
 Ile Leu Gly Ala Glu Met His Gly Leu Cys Gln Phe Leu Gly Asn Phe  
 145 150 155 160  
 Leu His Pro Ile Asn Thr Ile Phe Phe Phe Val Phe Thr His Ser Pro  
 165 170 175  
 Phe Cys Trp His Leu Ser Glu Val Val Leu Ser Arg Tyr Gln Pro Leu  
 180 185 190  
 Gln Tyr Val Arg Asp Val Leu Ser Ala Ala Phe Cys Thr Gly Phe Leu  
 195 200 205  
 Phe Ser Phe Met Ile Asn Asn Val Tyr Thr Leu Phe Leu Phe Ile Ile  
 210 215 220  
 Tyr Cys Val Arg Gln Glu Tyr Phe Ile Pro Asn Lys Glu Phe Ser Leu  
 225 230 235 240

&lt;210&gt; 5485

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5485

Asn Glu Ala Phe Ile Tyr Val Phe Arg Cys His Cys Ser Leu Ser Glu  
 1 5 10 15  
 Leu Ala Val His Ile Ser Leu Pro Leu Val Leu Ser Thr Asp Phe Phe

4855

20 25 30  
 Leu Lys Lys Arg Gly Thr Val Tyr His Ser Ser Thr Val Leu Leu  
 35 40 45

<210> 5486  
 <211> 72  
 <212> PRT  
 <213> Homo sapiens

<400> 5486  
 Tyr Glu Ala Lys Thr Lys Ser Trp Lys Ser Glu Gln Val Gln Trp Phe  
 1 5 10 15  
 Gly Arg Gly Asn Glu Glu Gln Arg Arg Cys Gln Pro Leu Leu Gln Thr  
 20 25 30  
 Leu Trp Tyr His Trp Phe Gly Arg Lys Asn Asn His His Leu Arg Gly  
 35 40 45  
 Pro Val Gly Lys Pro Cys Pro His Gly Lys Ala Ile Phe Phe Arg Leu  
 50 55 60  
 His Phe Ser Trp Tyr Tyr Val Tyr  
 65 70

<210> 5487  
 <211> 75  
 <212> PRT  
 <213> Homo sapiens

<400> 5487  
 Leu Thr Cys Tyr Val Thr Val Ile Tyr Leu Ser Ile Ser Asn Pro Lys  
 1 5 10 15  
 Ala Cys Gln Lys Ala Phe Phe Arg Glu Asn His Phe Thr Phe Val Val  
 20 25 30  
 Lys Leu Leu Ile Ala Thr Leu Lys Asn Ile His Val Cys Ile His Arg  
 35 40 45  
 Asn Ile Phe Ser Gln Tyr Leu Tyr Asp Ser Leu Thr Val Ile Val Leu  
 50 55 60  
 Ser Glu Leu Leu Cys Ala Ser Asp Lys Asn Lys  
 65 70 75

4856

<210> 5488  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (68)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (102)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (108)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5488

Gly	Pro	Arg	Arg	Thr	Leu	Ala	Ala	Leu	Pro	Leu	Ser	Arg	Val	Ser	Ala
1				5					10					15	
Gly	Ser	Gly	Ser	Ala	Ser	Pro	Gly	Gln	Leu	Arg	Glu	Ser	Leu	Ala	Arg
		20						25					30		
Ile	Pro	Ala	Ser	Thr	Leu	Phe	Leu	Ala	Ala	Lys	Val	Thr	Val	Pro	Phe
		35					40					45			
Ala	Pro	Ala	Leu	Ser	Asp	Pro	Pro	Arg	Ile	Pro	Arg	His	Arg	Glu	Thr
		50				55					60				
Arg	Lys	Gly	Xaa	Gly	Ser	Gly	Gly	Gly	Pro	Gly	Arg	Ile	Ala	Leu	Gln
65				70					75					80	
Ala	Ala	Leu	Arg	Gly	Pro	Ala	Pro	Ala	Thr	Ala	Leu	Thr	Ser	Glu	Arg
			85					90					95		
Arg	Asn	Trp	Gly	Glu	Xaa	Phe	Lys	Ser	Leu	Arg	Xaa	Arg	Cys		
		100					105						110		

<210> 5489  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

4857

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (74)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5489

Ser Gly Arg Gly Ser Pro Gln Trp Thr Arg Leu Pro His Pro Ala Glu  
 1 5 10 15

Val Gly Gly Gly His Glu Glu Met Gly Cys Arg Leu Leu Ser Glu Leu  
 20 25 30

Pro Ser Thr Asn Gly Val Gly Val Xaa Asp Leu Pro Arg His Xaa Phe  
 35 40 45

Phe Thr Phe Gly Lys Met Glu Gly Asp Gly Gly Gly Ile Pro Cys Ser  
 50 55 60

Leu Cys Cys Ala Asp Thr Leu Glu Lys Xaa Leu Pro Ser Val Glu Gln  
 65 70 75 80

Asn Pro Leu Trp Arg Asn Ala Ala Val Leu Asp Leu Glu Ala Glu Gly  
 85 90 95

Val Ser Ile Leu Gly Ile Cys Leu Pro Leu Pro Ile Trp Met Pro His  
 100 105 110

Leu Ala Val Ser Leu Met Val Ile Leu Phe  
 115 120

&lt;210&gt; 5490

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

4858

&lt;400&gt; 5490

Arg Leu Phe Ser Leu Xaa Gly Glu Cys His Lys Leu Leu Phe Cys Ile  
 1 5 10 15

Ser Thr Ala Cys Gln Ala Leu Ser Ala Ser Ser Asn Leu Ala Leu Thr  
 20 25 30

Ala Thr Gly Ser Arg Cys Pro Ile Phe Gln Ser Lys Asp Arg Gly Val  
 35 40 45

Lys Phe Lys Tyr Arg Phe Ser Asp Ile Asn Leu Cys Asp Asp Leu Ile  
 50 55 60

Glu Ala Gly Phe Ser Ser Ile Thr Val Leu Val Pro Ser Leu Leu Tyr  
 65 70 75 80

Gly Asn Glu Asn Lys Glu Thr Tyr Phe Leu Ala Cys Leu Lys Lys Lys  
 85 90 95

Lys

&lt;210&gt; 5491

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5491

Thr Tyr Thr Ile His Ala Asp Gly Thr Gly Ser Asn Met Asn Ile Asn  
 1 5 10 15

Asp Gly Gly Arg Arg Arg Phe Glu Asp Asn Glu His Thr Leu Arg Ile  
 20 25 30

Tyr Pro Gly Ala Ile Ser Glu Gly Thr Ile Tyr Cys Pro Ile Pro Ala  
 35 40 45

Arg Lys Asn Ser Thr Ala Ala Glu Val Ile Glu Ser Leu Ile Asn Lys  
 50 55 60

Leu His Leu Asp Lys Thr Lys Cys Tyr Val Leu Ala Glu Val Lys Glu  
 65 70 75 80

Phe Gly Gly Glu Glu Trp Ile Leu Asn Pro Thr Asp Cys Pro Val Gln  
 85 90 95

Arg Met Met Leu Trp Pro Arg Met Ala Leu Glu Asn Arg Leu Ser Gly  
 100 105 110



4859

Glu Asp Tyr Arg Phe Leu Leu Arg Glu Lys Asn Leu Asp Gly Ser Ile  
 115 120 125  
 His Tyr Gly Ser Leu Gln Ser Trp Leu Arg Val Thr Glu Glu Arg Arg  
 130 135 140  
 Arg Met Met Glu Arg Gly Phe Leu Pro Gln Pro Gln Gln Lys Asp Phe  
 145 150 155 160  
 Asp Asp Leu Cys Ser Leu Pro Asp Leu Asn Glu Lys Thr Leu Leu Glu  
 165 170 175  
 Asn Leu Arg Asn Arg Phe Lys His Glu Lys Ile Tyr Thr Tyr Val Gly  
 180 185 190  
 Ser Ile Leu Ile Val Ile Asn Pro Phe Lys Phe Leu Pro Ile Tyr Asn  
 195 200 205  
 Pro Lys Tyr Val Lys Met Tyr Asp Asn His Gln Leu Gly Lys Leu Glu  
 210 215 220  
 Pro His Ile Tyr Ala Val Ala Asp Val Ala Tyr His Ala Met Leu Gln  
 225 230 235 240  
 Arg Lys Lys Asn Gln Cys Ile Val Ile Ser Gly Glu Ser Gly Ser Gly  
 245 250 255  
 Lys Thr Gln Ser Thr Asn Phe Leu Ile His His Leu Thr Ala Leu Ser  
 260 265 270  
 Gln Lys Gly Phe Ala Ser Gly Val Glu Gln Ile Ile Leu Gly Ala Gly  
 275 280 285  
 Pro Val Leu Glu Ala Val  
 290

&lt;210&gt; 5492

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5492

Pro Tyr Leu Arg Arg Arg Asp Thr Gln Asp Lys Leu Gln Val Val Ser  
 1 5 10 15

Arg Phe Thr Phe Tyr Phe Glu Asp Pro Leu Leu Pro Gln Val Pro Asp  
 20 25 30

4860

Leu Glu Asn Glu Pro Pro Leu Ser Gly Leu Ala Ser Pro Gln Pro Arg  
35 40 45

His Arg Leu Ala Gln Gly Ser Ser Ser Trp Leu Ser Trp Asn Leu His  
50 55 60

Phe Leu Thr Thr Arg Lys Arg Ser Pro Glu Leu Thr Lys Asn Asn Ile  
65 70 75 80

Leu Leu Thr Trp Glu  
85

&lt;210&gt; 5493

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (51)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (127)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (130)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (135)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (188)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (231)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

## 4861

&lt;222&gt; (245)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (271)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5493

His	Tyr	Arg	Glu	Ser	Trp	Tyr	Ala	Cys	Arg	Tyr	Arg	Ser	Gly	Ile	Pro
1				5					10					15	

Gly	Ser	Thr	His	Ala	Ser	Gly	Pro	Thr	Ser	Pro	Pro	Ala	Arg	Met	Ala
			20					25					30		

Pro	Pro	Gly	Pro	Ala	Ser	Ala	Leu	Ser	Thr	Ser	Ala	Glu	Pro	Leu	Ser
		35					40					45			

Arg	Ser	Xaa	Phe	Arg	Lys	Phe	Leu	Leu	Met	Leu	Cys	Ser	Leu	Leu	Thr
	50					55					60				

Ser	Leu	Tyr	Val	Phe	Tyr	Cys	Leu	Ala	Glu	Arg	Cys	Gln	Thr	Leu	Ser
65					70					75					80

Gly	Pro	Val	Val	Gly	Leu	Ser	Gly	Gly	Gly	Glu	Glu	Ala	Gly	Ala	Pro
				85					90					95	

Gly	Gly	Gly	Val	Leu	Ala	Gly	Pro	Arg	Glu	Leu	Ala	Val	Trp	Pro	Ala
			100					105					110		

Ala	Ala	Gln	Arg	Lys	Arg	Leu	Leu	Gln	Leu	Pro	Gln	Trp	Arg	Xaa	Arg
		115					120					125			

Arg	Xaa	Pro	Ala	Pro	Arg	Xaa	Asp	Gly	Glu	Glu	Ala	Ala	Trp	Glu	Glu
	130					135					140				

Glu	Ser	Pro	Gly	Leu	Ser	Gly	Val	Arg	Ala	Ala	Pro	Gly	Pro	Glu	Ala
145					150					155					160

Pro	Trp	Pro	Arg	Pro	Arg	Arg	Gly	Pro	Trp	Arg	Cys	Ser	Trp	Thr	Lys
				165					170					175	

Ala	Ala	Ser	Ser	Cys	Arg	Ser	Ile	Ile	Ile	Gly	Xaa	Lys	Lys	Gly	Gly
			180					185					190		

Thr	Arg	Ala	Leu	Leu	Glu	Phe	Leu	Arg	Val	His	Pro	Asp	Val	Arg	Ala
		195					200					205			

Val	Gly	Ala	Glu	Pro	His	Phe	Phe	Asp	Arg	Ser	Tyr	Asp	Lys	Gly	Leu
	210					215					220				

## 4862

Ala Trp Tyr Arg Asp Leu Xaa Pro Arg Thr Leu Glu Gly Gln Ile Thr  
 225 230 235 240

Met Glu Lys Lys Xaa Ser Tyr Ser Ser Ser Gly Lys Pro Pro Arg Ala  
 245 250 255

Ser Trp Ala Cys Ser Lys Asp Asn Lys Leu Ile Arg Trp Leu Xaa Gly  
 260 265 270

Asn Arg

<210> 5494

<211> 66

<212> PRT

<213> Homo sapiens

<400> 5494

Gly Val Gly His Ser Glu Leu Thr Ser Met Phe Asn Thr Ile Thr Arg  
 1 5 10 15

Asp Thr Glu Thr Ala Asn Gln Asp Lys Lys Leu Thr Thr Ser Arg Cys  
 20 25 30

Arg Gln Leu Phe Pro Arg Cys Gln Asn Lys Thr Ser Tyr His Asp Glu  
 35 40 45

Ala Pro Thr Pro Leu Asn Leu Pro Ser Ser Cys Leu Pro Leu Ser Leu  
 50 55 60

Ala Gly  
 65

<210> 5495

<211> 117

<212> PRT

<213> Homo sapiens

<400> 5495

Leu Asp Arg Ile Phe Ser Gly Gly Ser Leu Val Asp Phe Glu Gly Lys  
 1 5 10 15

Thr Phe Trp Val Tyr His Val Leu Ile Leu Glu Thr Gly Ser Asp Glu  
 20 25 30

Ser Ser Pro Val Val Pro Leu Ser Asn Ser Ile Lys Val Gly Ile Ser  
 35 40 45

4863

Lys Glu His Leu Ile Gln Gly Ala Gly Ala Asp Phe Ile Asp Ser Arg  
 50 55 60

Glu Thr Cys Phe Ser Ala Tyr Ser Ser Leu Pro Ser Gly Ala Ser Leu  
 65 70 75 80

Leu Thr Ile Thr Ala Ser Leu Arg Cys Arg Trp Val Phe Leu Lys Gln  
 85 90 95

Glu Thr Val Ser Pro Leu Leu Pro Gln Leu Leu Gly Val Gly Ile Ser  
 100 105 110

Asp Thr Gly Asp Gly  
 115

<210> 5496

<211> 171

<212> PRT

<213> Homo sapiens

<400> 5496

Ile Thr Met Asp Trp Gln Ser Ile Lys Ile Gln Glu Leu Met Ser Asp  
 1 5 10 15

Asp Gln Arg Glu Ala Gly Arg Ile Pro Arg Thr Ile Glu Cys Glu Leu  
 20 25 30

Val His Asp Leu Val Asp Ser Cys Val Pro Gly Asp Thr Val Thr Ile  
 35 40 45

Thr Gly Ile Val Lys Val Ser Asn Ala Glu Glu Gly Ser Arg Asn Lys  
 50 55 60

Asn Asp Lys Cys Met Phe Leu Leu Tyr Ile Glu Ala Asn Ser Ile Ser  
 65 70 75 80

Asn Ser Lys Gly Gln Lys Thr Lys Ser Ser Glu Asp Gly Cys Lys His  
 85 90 95

Gly Met Leu Met Glu Phe Ser Leu Lys Asp Leu Tyr Ala Ile Gln Glu  
 100 105 110

Ile Gln Ala Glu Glu Asn Leu Phe Lys Leu Ile Val Asn Ser Leu Cys  
 115 120 125

Pro Val Ile Phe Gly His Glu Leu Val Lys Ala Gly Leu Ala Leu Ala  
 130 135 140

## 4864

Leu Phe Gly Gly Ser Gln Lys Tyr Ala Asp Asp Lys Asn Arg Ile Pro  
 145 150 155 160

Ile Arg Gly Asp Pro His Ile Leu Val Gly Phe  
 165 170

<210> 5497

<211> 24

<212> PRT

<213> Homo sapiens

<400> 5497

Ser Val Lys Cys Arg Leu Ser Ser Phe Ile Met Asn Val Ile Val Arg  
 1 5 10 15

Asn Thr Leu Thr Phe Ser Asn Phe  
 20

<210> 5498

<211> 74

<212> PRT

<213> Homo sapiens

<400> 5498

Gly Phe Ser Gln Arg Arg Val Cys Ser Gly Arg Cys Cys Gly Gln Gly  
 1 5 10 15

Ser Arg Gln Arg Pro Leu Ser Ser Arg Leu Ala Pro Ala Leu Arg Gly  
 20 25 30

His Gly Gly Ala Glu Ala Thr Arg Ala Gly Pro Glu Pro Gly Gly Pro  
 35 40 45

Trp Leu Arg Phe Ser Cys Thr Glu Lys Leu Asn Pro Ala Arg Ser Asp  
 50 55 60

Val His Phe Met Val Pro Thr Pro Leu Gly  
 65 70

<210> 5499

<211> 153

<212> PRT

<213> Homo sapiens

<220>

## 4865

<221> SITE  
 <222> (123)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (132)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (134)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (141)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 5499  
 Thr Cys Tyr Ala Thr Pro Cys Leu Val Trp Met Gly Arg Trp Pro Pro  
 1 5 10 15  
 Ala Val Thr Leu Thr Cys Arg Pro Thr Ala Thr Val Pro Trp Ser Pro  
 20 25 30  
 Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu Ala Arg Ser Leu Cys Ser  
 35 40 45  
 Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr Ser Leu Pro Ser Trp Arg  
 50 55 60  
 Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln Leu Ser Gly Gln Trp Trp  
 65 70 75 80  
 Ser Ala Gly Ala Cys Phe Leu Asp Leu Pro Ser Leu Ala Leu Cys Trp  
 85 90 95  
 Pro Gly Asp Ser Gly Asp Ala Ser Gly Gln Lys Pro Gly Ala Glu Gln  
 100 105 110  
 Thr Leu Gly Cys Ser Gly Trp Ala Gln Ala Xaa Phe Arg Leu Ala Ala  
 115 120 125  
 Thr Val Arg Xaa Pro Xaa Arg Pro Gln Ala Pro Ser Xaa Arg Ala Phe  
 130 135 140  
 Leu Pro Leu His Phe Pro Thr Ile Glu  
 145 150

4866

<210> 5500  
 <211> 142  
 <212> PRT  
 <213> Homo sapiens

<400> 5500

Trp Thr Trp Ser Thr Pro Ala Ser Ala Arg Ser Ser Gly Thr Thr Thr  
 1 5 10 15

Trp Pro Pro Ala Pro Ala Ala Ala Leu His Leu Arg Leu Arg Gly Val  
 20 25 30

Gln Arg Arg Arg Ile Leu Thr Met Glu Pro Val Leu Gly Gly Thr Pro  
 35 40 45

Tyr Leu Asp Lys Phe Val Val Ser Ser Ser Arg Gln Gly Gln Gly Ser  
 50 55 60

Gly Gln Met Leu Trp Glu Cys Leu Arg Arg Asp Leu Gln Thr Leu Phe  
 65 70 75 80

Trp Arg Ser Arg Val Thr Asn Pro Ile Asn Pro Trp Tyr Phe Lys His  
 85 90 95

Ser Asp Gly Ser Phe Ser Asn Lys Gln Trp Ile Phe Phe Trp Phe Gly  
 100 105 110

Leu Ala Asp Ile Arg Asp Ser Tyr Glu Leu Val Asn His Ala Lys Gly  
 115 120 125

Leu Pro Asp Ser Phe His Lys Pro Ala Ser Asp Pro Gly Ser  
 130 135 140

<210> 5501  
 <211> 100  
 <212> PRT  
 <213> Homo sapiens

<220>

<221> SITE

<222> (23)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids



4867

&lt;400&gt; 5501

Gln Arg Glu Asn Arg Pro Cys Leu Lys Glu Arg Phe Leu Val Tyr Ala  
 1                      5                      10                      15  
 Ser Gly Leu Trp Ala Gly Xaa Ala Thr Ile Pro Tyr Xaa Arg Gln Ser  
                     20                      25                      30  
 Ser Ala Pro Ala Ala Lys Leu Ala Cys Phe Thr Gly Lys Leu Leu Glu  
                     35                      40                      45  
 Glu Trp Leu Leu Met Arg Phe Gln Asn Glu Val Leu Ala Asn Thr Ala  
                     50                      55                      60  
 His Gly His Pro Gly Phe Ser Gln Trp Leu Pro Phe Leu Leu Ala Ser  
 65                      70                      75                      80  
 Leu Asn Arg Gly Glu Ser Leu Thr Ser Leu Leu Leu Ser Lys Pro Phe  
                     85                      90                      95  
 Thr Leu Asn Gly  
                     100

&lt;210&gt; 5502

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5502

Lys Trp Asp Glu Pro Trp Tyr Asn Gln Lys Thr Glu His Gln Arg Asn  
 1                      5                      10                      15  
 Ser Ser Lys Ile Leu Arg Phe Ile Ser Asp Phe Leu Ala Phe Leu Val  
                     20                      25                      30  
 Leu Tyr Asn Phe Ile Ile Pro Ile Ser Leu Tyr Val Thr Val Glu Met  
                     35                      40                      45  
 Gln Lys Phe Leu Gly Ser Phe Phe Ile Gly Trp Asp Leu Asp Leu Tyr  
                     50                      55                      60  
 His Glu Glu Ser Asp Gln Lys Ala Gln Val Asn Thr Ser Asp Leu Asn  
 65                      70                      75                      80  
 Glu Glu Leu Gly Gln Val Glu Tyr Val Phe Thr Asp Lys Thr Gly Thr  
                     85                      90                      95  
 Leu Thr Glu Asn Glu Met Gln Phe Arg Glu Cys Ser Ile Asn Gly Met  
                     100                      105                      110

4868

Lys Tyr Gln Glu Ile Asn Gly Arg Leu Val Pro Glu Asp Gln His Gln  
115 120 125

Thr Leu Gln Lys Glu Thr Tyr Leu Ile Leu Val Val Tyr Pro Ile Leu  
130 135 140

Thr Thr Tyr Pro Ile Leu Gln Pro Val Pro Leu Ser Glu Pro Val Leu  
145 150 155 160

Lys Met Lys Leu Asn  
165

&lt;210&gt; 5503

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5503

Arg Leu Pro Ser Glu Val Ser Asp His Ser Leu Leu Leu Lys Gln Leu  
1 5 10 15

Leu Leu Phe Leu Tyr Ser Ile Glu His Pro Gly Ile Asp Ile Ile Leu  
20 25 30

Ser Ile Ser Ile Ser Pro Leu Leu Val Tyr Leu Ile Ile Asn Pro Val  
35 40 45

Ser Arg Ala Val Phe Ile  
50

&lt;210&gt; 5504

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (57)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (175)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

4869

&lt;222&gt; (178)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5504

His	Glu	Gly	Lys	Cys	Phe	Cys	Arg	Lys	Ser	Thr	Leu	Thr	Thr	His	Leu
1				5					10					15	
Arg	Thr	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asn	Glu	Cys	Gly	Lys
			20					25					30		
Phe	Phe	Ser	Arg	Leu	Ser	Tyr	Leu	Thr	Val	His	Tyr	Arg	Thr	His	Ser
		35					40					45			
Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asn	Xaa	Cys	Gly	Lys	Thr	Phe	Tyr	Leu
	50					55					60				
Asn	Ser	Ala	Leu	Met	Arg	His	Gln	Arg	Val	His	Thr	Gly	Glu	Lys	Pro
65					70					75					80
Tyr	Glu	Cys	Asn	Glu	Cys	Gly	Lys	Leu	Phe	Ser	Gln	Leu	Ser	Tyr	Leu
			85						90					95	
Thr	Ile	His	His	Arg	Thr	His	Ser	Gly	Val	Lys	Pro	Tyr	Glu	Cys	Ser
			100					105					110		
Glu	Cys	Gly	Lys	Thr	Phe	Tyr	Gln	Asn	Ser	Ala	Leu	Cys	Arg	His	Arg
		115					120					125			
Arg	Ile	His	Lys	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Tyr	Ile	Cys	Gly	Lys
	130					135					140				
Phe	Phe	Ser	Gln	Met	Ser	Tyr	Leu	Thr	Ile	His	His	Arg	Ile	His	Ser
145					150					155					160
Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Ser	Glu	Cys	Gly	Lys	Thr	Phe	Xaa	Gln
			165					170						175	
Asn	Xaa	Ala	Leu	Asn	Arg	His	Gln	Arg	Thr	His	Thr	Gly	Glu	Lys	Ala
			180					185					190		
Tyr	Glu	Cys	Tyr	Glu	Cys	Gly	Lys	Cys	Phe	Ser	Gln	Met	Ser	Tyr	Leu
		195					200					205			
Thr	Ile	His	His	Arg	Ile	His	Ser	Gly	Glu	Asn	Leu				
	210					215					220				

&lt;210&gt; 5505

&lt;211&gt; 111

&lt;212&gt; PRT

4870

&lt;213&gt; Homo sapiens

&lt;400&gt; 5505

Lys Arg Glu Phe Ala Gly Glu Lys Arg Leu Asp Leu Val Glu Asp Cys  
1 5 10 15  
Leu Gly Trp Gly Ser Thr Thr Trp Arg Phe Gln Ile His Leu Ala Cys  
20 25 30  
Lys Gln Gln Ser Tyr Pro Tyr Leu Pro His Val Asn Val Ile Ala Arg  
35 40 45  
Val Thr Leu Asp Lys Leu Gln Thr Asp Gly Pro Ser Ser Ser Pro Gly  
50 55 60  
Ala Pro Trp Met Ala Ala Leu Leu Gln Ser Val Ser Cys Phe Trp Asn  
65 70 75 80  
Ser Leu Leu Gly Asn Phe Lys Glu Glu Lys Lys Asn Leu Asn Cys Val  
85 90 95  
Glu Leu Leu Tyr Leu Leu Leu Phe Phe Phe Glu Lys Ile Asn Leu  
100 105 110

&lt;210&gt; 5506

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (55)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (132)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5506

Thr Lys Ser Ser Ala Leu Gly Pro Arg Ala Pro Ser Leu Arg Arg His  
1 5 10 15  
Val Leu Ile His Asn Thr Leu Gln Gln Leu Gln Ala Ala Leu Arg Leu  
20 25 30  
Ala Pro Ala Pro Ala Leu Pro Pro Glu Pro Leu Phe Leu Gly Glu Glu  
35 40 45

## 4871

Asp Phe Ser Leu Ser Ala Xaa Ile Gly Ser Ile Leu Arg Glu Leu Asp  
 50 55 60

Thr Ser Met Asp Gly Thr Glu Pro Pro Gln Asn Pro Val Thr Pro Leu  
 65 70 75 80

Gly Leu Gln Asn Glu Val Pro Pro Gln Pro Asp Pro Val Phe Leu Glu  
 85 90 95

Ala Leu Ser Ser Arg Tyr Leu Gly Asp Ser Gly Leu Asp Asp Phe Phe  
 100 105 110

Leu Asp Ile Asp Thr Ser Ala Val Glu Lys Glu Pro Ala Arg Ala Pro  
 115 120 125

Pro Glu Pro Xaa His Asn Leu Phe Cys Ala Pro Gly Ser Trp Glu Trp  
 130 135 140

Asn Glu Leu Asp His Ile Met Glu Ile Ile Leu Gly Ser  
 145 150 155

<210> 5507

<211> 45

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5507

Lys Met Met Arg Val His Gln Asp Ser Thr Xaa Glu Lys Leu Pro Phe  
 1 5 10 15

4872

Phe Pro Leu Xaa Ala Asp Trp Lys Ala Ser Arg Ala Xaa Leu Cys Ala  
                   20                                  25                                  30

Leu Phe Arg Xaa Thr His Lys Asp Leu Gly Lys Cys Lys  
                   35                                  40                                  45

&lt;210&gt; 5508

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (152)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5508

Asn Phe Ile Phe Ile Leu Lys Leu His Leu Leu Lys Ser Leu Lys Ile  
   1                                  5                                  10                                  15

Ile Ser Val His Val Leu Asn Thr Ser Leu Tyr Ser Val Ile Asn Thr  
                   20                                  25                                  30

Pro Asp Phe Phe Pro Leu Thr Leu Cys His Pro Ser Val Cys Leu Val  
                   35                                  40                                  45

Ser Ser Met Pro Cys Gly Arg Gly Val Ser Leu Ser Ser Ala Gln Glu  
                   50                                  55                                  60

Gly Asn Phe Lys His Ile Cys Thr Ile Lys Phe Gln Ile Lys His Phe  
   65                                  70                                  75                                  80

Lys Lys Gly Ala Gln Thr Arg Asn Thr Cys Ser Ser Glu Ile Pro Cys  
                                   85                                  90                                  95

Cys Asn Cys Asn Ser Cys His Ile Tyr Pro Val Tyr Glu Glu Lys Phe  
                   100                                  105                                  110

Leu Gln Phe Ser His Cys Pro Ser Val Leu Leu Pro Gly Cys Ala Leu  
                   115                                  120                                  125

Leu Leu Glu Leu Lys Tyr Glu Ile Phe Thr Leu Lys Tyr Val Asn Val  
                   130                                  135                                  140

Lys Val Asp Arg Ile Lys Phe Xaa Asn Pro Leu Arg Phe Ile  
   145                                  150                                  155

4873

&lt;210&gt; 5509

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5509

Ile Thr Gly Met Ser His Cys Ala Arg Pro Ser Phe Leu Phe Asn Lys  
1 5 10 15

Cys Met Tyr Leu Lys Ala Ile Ala Phe Ser Arg Asn Leu Phe Leu Cys  
20 25 30

Ser Gly Arg Ala Tyr Lys Leu Cys Leu Gln Leu Phe Phe Phe Ser Lys  
35 40 45

Gly Asn Thr Ser Gly Arg  
50

&lt;210&gt; 5510

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5510

Ser Thr Arg Gln Pro Asn Pro Phe Gly Ala Thr Ile Asp Cys Tyr Lys  
1 5 10 15

Ala His Pro Trp Val Lys Ile Tyr Tyr Leu Gln Leu Tyr Leu Met Thr  
20 25 30

Leu Ile Leu Pro Ser Ser Tyr Ile Lys Phe Gly Xaa Val Phe Tyr Xaa  
35 40 45

Ile Ile Phe  
50

4874

<210> 5511  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (111)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (113)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5511  
 Gln Pro Arg Arg Pro Pro Arg Cys Pro Leu Pro Arg Gly Pro Trp Gly  
 1 5 10 15  
 Arg Pro Arg Ala Thr Gly Pro Gln Leu Gly Cys Ile Ser Ser Thr Ser  
 20 25 30  
 Cys Pro Ala Pro Thr Ser Ser Ser Ala Arg Cys Pro Ala Phe Ser Arg  
 35 40 45  
 Pro Arg Ala Gly Ile Pro Ala Gly Leu Val Ala Gly Gly Gly Leu Gly  
 50 55 60  
 Gly Pro Gly Leu Gly Pro Glu Pro His Phe His Arg Cys Leu Pro His  
 65 70 75 80  
 Pro Leu Leu Leu Leu Pro Ala Pro Arg Ala Pro Arg Val Gln Asp Pro  
 85 90 95  
 Leu Ala Arg Gly Arg Leu Arg His Leu Glu Leu Ile Val Pro Xaa Ser  
 100 105 110  
 Xaa Ala Ala Leu Ala Leu Ala Ser  
 115 120

<210> 5512  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (67)  
 <223> Xaa equals any of the naturally occurring L-amino acids



4875

&lt;400&gt; 5512

Ala Ile Leu Lys Gln Thr Pro Leu Lys Lys Gln Thr Asn Lys Lys Asn  
 1 5 10 15

Ile Asp Phe Phe Ile Ser Phe Glu Leu Pro Pro Phe Tyr Tyr Val Met  
 20 25 30

Asn Met Cys Cys Phe Cys Asn Arg Lys Ile Ile Lys Leu Lys Phe Gln  
 35 40 45

Leu Gln Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 50 55 60

Lys Lys Xaa  
 65

&lt;210&gt; 5513

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (93)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5513

Asn Ala Thr Ile Ile Val Asn Lys Ile Pro Val Asn Thr Cys Cys Leu  
 1 5 10 15

Cys Cys Leu Ser Pro Asp Ser Arg Ala Glu Phe Ser Phe Cys Thr Val  
 20 25 30

Ala Leu Ala Leu Thr Val Thr Ala Leu Gln Gln Ala Pro Ser Pro Arg  
 35 40 45

Pro Phe Arg Ser Ile Pro Gln Arg Val Leu His Val Ser Ser Pro Met  
 50 55 60

Ser Ser Leu Gly Ser Ser Val Lys Thr His Ser Ser Pro Ala Gly Val  
 65 70 75 80

Leu Arg Asp Ala Arg Ser Leu Trp Gly Gln Phe Gly Xaa Ile Asp Ile  
 85 90 95

His Val

4876

<210> 5514  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<400> 5514  
 Gly Lys Lys Arg Lys Lys Leu Tyr Phe Phe Ser Ile Tyr Leu Leu Gln  
     1                    5                    10                    15  
 Arg Thr Leu Cys Phe Leu Ser Cys Lys Thr Ser Tyr Phe Ser Tyr Tyr  
                     20                    25                    30  
 Cys Thr Leu Glu Lys Ser Cys Arg Phe Met Leu Asn Ser Tyr Leu Arg  
                     35                    40                    45  
 Thr Ile Val Ile Ser Ser Lys Arg His Glu Leu Ser Ser  
                     50                    55                    60

<210> 5515  
 <211> 53  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (34)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (53)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5515  
 Phe Lys Ala Leu Asn Ser Lys Ser Ile Lys Thr Tyr Leu Gly Glu Thr  
     1                    5                    10                    15  
 Gly Ile Met Gln Phe Ile Thr Cys Ile His Ser Ser Ile Gln Lys Tyr  
                     20                    25                    30  
 Gly Xaa Ile Trp Tyr Leu Lys Leu Lys Cys Gly Ser Lys Ala Thr Lys  
                     35                    40                    45  
 Ser Glu Thr Trp Xaa  
                     50

4877

&lt;210&gt; 5516

&lt;211&gt; 33

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5516

Phe	Ala	Asn	Leu	Lys	Ile	Gly	Thr	Pro	Leu	Gly	Met	Pro	Asp	Arg	Arg
1				5					10					15	

Val	Leu	His	Ile	Cys	Arg	Gly	Arg	Gln	Glu	Leu	Asn	Ile	Thr	Thr	Ser
			20					25					30		

Phe

&lt;210&gt; 5517

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (11)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (68)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5517

Ala	Thr	Glu	Pro	Ser	Leu	Leu	Xaa	Ser	Phe	Xaa	His	Asn	Phe	Cys	Phe
1				5					10					15	

4878

Ile His Asn Phe Ser Ser Ile Glu Ser Arg Ile Lys Thr Trp Val Leu  
                   20                  25                  30

Ser Leu Xaa Leu Ser Val Glu Ala Tyr Glu Cys Leu Leu Lys Ile Met  
           35                  40                  45

Phe Leu Asn Ala Leu Asn Ile Xaa Asp Tyr Lys Gly Ile Leu Leu Phe  
       50                  55                  60

Glu Ile Arg Xaa  
   65

<210> 5518

<211> 95

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5518

Thr Asn Arg Pro Leu Ser Phe Pro Gln Phe Ile Thr Phe Ser Leu Phe  
   1                  5                  10                  15

Thr Leu Cys Pro Met Thr Phe Leu His His Trp Leu Leu Phe Ile Lys  
           20                  25                  30

Pro Thr Ile Lys Asn Ile Gln Val Gln Leu Phe Leu Trp Ala Phe Ile  
       35                  40                  45

Ser Leu Trp Xaa Pro Ser Cys Arg Val Lys Leu Ile Leu Asn Lys Cys  
       50                  55                  60

Ala Cys Phe Ser Leu Ala Asn Leu Ser Phe Val Ile Glu Ile Ser Ala  
   65                  70                  75                  80

Leu Asn Leu Gly Trp Ile Glu Gly Asn Ile Cys Ser Pro Leu His  
                   85                  90                  95

<210> 5519

<211> 41

<212> PRT

<213> Homo sapiens

4879

&lt;400&gt; 5519

Asp Gly Ile Val His Phe Leu Val Leu Ser Gln Val Gln Pro Val Cys  
 1 5 10 15

Gly Asn Leu Ser Leu Pro Thr Ser Phe Val Ala Leu Val Cys Ser Gly  
 20 25 30

Gln Lys Val Arg Ala Pro Leu Leu Thr  
 35 40

&lt;210&gt; 5520

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (64)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5520

Arg Cys Ser Ser Ile Phe Thr Pro Trp Lys Leu Thr Thr Leu Ser Ser  
 1 5 10 15

Phe Leu His His His Pro Gly Ala Gln Arg Ser Lys Leu Leu Ser Ile  
 20 25 30

Phe Ser Pro Ser Pro Arg Thr Leu Thr Leu Tyr Arg Met Gly Pro Ser  
 35 40 45

Ser Cys Leu Leu Leu Ile Leu Ile Pro Leu Leu Gln Leu Ile Asn Xaa  
 50 55 60

Gly Ser Thr Gln Cys Ser Leu Asp Ser Val Met Asp Lys Lys Ile Lys  
 65 70 75 80

Asp Val Leu Asn Ser Leu Glu Tyr Ser Pro Ser Pro Ile Ser Lys Lys  
 85 90 95

Leu Ser Cys Ala Ser Val Lys Ser Gln Gly Arg Pro Ser Ser Cys Pro  
 100 105 110

Ala Gly Met Ala Val Thr Gly Cys Ala Cys Gly Tyr Gly Cys Gly Ser  
 115 120 125

Trp Asp Val Gln Leu Glu Thr Thr Cys His Cys Gln Cys Ser Val Val  
 130 135 140

Asp Trp Thr Thr Ala Arg Cys Cys His Leu Thr

4880

145

150

155

&lt;210&gt; 5521

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5521

Ile Lys Val Asp Gly Lys Ala Ile Ser Ile Arg Ile Glu Thr Glu Ser  
 1 5 10 15

Tyr Asn Thr Val Cys Thr Thr Leu Arg Trp Ile His Ser Ala His Ala  
 20 25 30

Leu Asn Val Tyr Ile Val Leu Ser Val Gly Ser Gly Thr Phe Ser Leu  
 35 40 45

Val Phe Leu Lys Asn Tyr Lys Ser Glu Glu Lys Ala Ser Ile Ile Asn  
 50 55 60

Lys Thr Asn Asn Cys Phe Thr Ala Leu Arg Asn Asn Asn Tyr Asn Val  
 65 70 75 80

Tyr Tyr Leu Lys Met Gly Glu Ile Val Cys Ser Met Lys  
 85 90

&lt;210&gt; 5522

&lt;211&gt; 48

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5522

Ile Ser His Ala Ile Ile Trp Val Cys Cys Ile Lys Ser Ser Thr Thr  
 1 5 10 15

Leu Trp Phe Ser His Cys Ile Ile Lys His Glu Ala Ser Arg Ile Lys  
 20 25 30

Ser Tyr Cys Phe Thr Cys Leu Leu Ser Pro Leu Cys His Phe Thr Phe  
 35 40 45

&lt;210&gt; 5523

4881

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5523

His Glu Glu Lys Thr Thr Tyr Asp Ser Ala Glu Glu Glu Asn Lys Glu  
 1 5 10 15

Asn Leu Tyr Ala Gly Lys Asn Thr Lys Ile Lys Arg Ile Tyr Lys Thr  
 20 25 30

Val Ala Asp Ser Asp Glu Ser Tyr Met Glu Lys Ser Leu Tyr Gln Glu  
 35 40 45

Asn Leu Glu Ala Gln Val Lys Pro Cys Leu Glu Leu Ser Leu Gln Ser  
 50 55 60

Gly Asn Ser Thr Asp Phe Thr Thr Asp Arg Lys Ser Ser Lys Lys His  
 65 70 75 80

Ile His Asp Lys Glu Gly Thr Ala Gly Lys Ala Lys Val Lys Ser Lys  
 85 90 95

Arg Arg Leu Glu Lys Glu Glu Arg Lys Met Glu Lys Ile Arg Gln Leu  
 100 105 110

Lys Lys Lys Glu Thr Lys Asn Gln Glu Asp Asp Val Glu Gln Pro Phe  
 115 120 125

Asn Asp Ser Gly Cys Leu Leu Val Asp Lys Asp Leu Phe Glu Thr Gly  
 130 135 140

Leu Glu Asp Glu Asn Asn Ser Pro Leu Glu Asp Glu Glu Ser Leu Glu  
 145 150 155 160

Ser Ile Arg Ala Ala Val Lys Asn Lys  
 165

&lt;210&gt; 5524

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5524

Gly Gly Thr Gly Ser Glu Cys Arg Ala Gln Gly Glu Ile Gly Ser Pro  
 1 5 10 15

Cys Arg Thr Cys Ser Ser Pro Ala Pro Lys Gly Asp Gly Val Trp Ala  
 20 25 30

4882

Trp Gly Phe Leu His Val Pro Pro Tyr Pro Asp Pro Ser Ser Gln Ser  
           35                          40                          45

Val Thr Leu Leu Trp Ala Gln Pro Pro Asn Arg Ser His Leu Gly Leu  
       50                          55                          60

Gly Gln Thr  
   65

&lt;210&gt; 5525

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5525

Pro Thr Arg Pro Pro Thr Arg Pro Pro Thr Arg Pro Asp Ser Ser Lys  
   1                          5                          10                          15

Pro Ile Val Arg Glu Ser Trp Met Thr Glu Leu Pro Pro Glu Met Lys  
                           20                          25                          30

Asp Phe Gly Leu Gly Pro Arg Thr Phe Lys Arg Arg Ala Asp Asp Thr  
           35                          40                          45

Ser Gly Asp Arg Ser Ile Trp Thr Asp Thr Pro Ala Asp Arg Glu Arg  
       50                          55                          60

Lys Ala Lys Glu Thr Gln Glu Ala Arg Lys Ser Ser Ser Lys Lys Asp  
   65                          70                          75                          80

Glu Glu His Ile Leu Ser Gly Arg Asp Lys Arg Leu Ala Glu Gln Val  
                           85                          90                          95

Ser Ser Tyr Asn Glu Ser Lys Arg Ser Glu Ser Leu Met Asp Ile His  
                           100                          105                          110

His Lys Lys Leu Lys Ser Lys Ala Ala Glu Asp Lys Asn Lys Pro Gln  
           115                          120                          125

Glu Arg Ile Pro Phe Asp Arg Asp Lys Asp Leu Lys Val Asn Arg Phe  
       130                          135                          140

Asp Glu Ala Gln Lys Lys Ala Leu Ile Lys Lys Ser Arg Glu Leu Asn  
   145                          150                          155                          160

Thr Arg Phe Ser His Gly Lys Gly Asn Met Phe Leu  
                           165                          170



4883

&lt;210&gt; 5526

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (53)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5526

Ala	Phe	Ser	Arg	Lys	Ser	His	Leu	Ile	Pro	His	Gln	Arg	Thr	His	Thr
1				5					10					15	

Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ser	Glu	Cys	Arg	Lys	Ala	Phe	Ser	Gln
			20					25					30		

Lys	Ser	Gln	Leu	Val	Asn	His	Gln	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro
		35					40					45			

Tyr	Arg	Cys	Ile	Xaa	Cys	Gly	Lys	Ala	Phe	Ser	Gln	Lys	Ser	Gln	Leu
	50					55					60				

Ile	Asn	His	Gln	Arg	Thr	His	Thr	Val	Lys	Lys	Ser
65					70					75	

&lt;210&gt; 5527

&lt;211&gt; 398

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (382)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (395)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5527

Cys	Val	Asn	Pro	Glu	Leu	Ile	Ile	Trp	Val	Asn	Arg	Phe	Val	Met	Cys
1				5					10					15	

Phe	Phe	Val	Glu	Leu	Lys	Lys	Ala	Ser	Lys	Arg	Met	Thr	Cys	His	Lys
			20					25					30		

4884

Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys Leu Arg  
 35 40 45  
 Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp Pro Gly  
 50 55 60  
 Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Arg Glu Ala Glu  
 65 70 75 80  
 Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys Leu Asp  
 85 90 95  
 Arg Gln Lys Glu Leu Glu Lys Lys Arg Lys Leu Glu Thr Asn Pro Asp  
 100 105 110  
 Ile Lys Pro Ser Asn Val Glu Pro Met Glu Lys Glu Phe Gly Leu Cys  
 115 120 125  
 Lys Thr Glu Asn Lys Ala Lys Ser Gly Lys Gln Asn Ser Lys Lys Leu  
 130 135 140  
 Tyr Cys Gln Glu Leu Lys Lys Val Ile Glu Ala Ser Asp Val Val Leu  
 145 150 155 160  
 Glu Val Leu Asp Ala Arg Asp Pro Leu Gly Cys Arg Cys Pro Gln Val  
 165 170 175  
 Glu Glu Ala Ile Val Gln Ser Gly Gln Lys Lys Leu Val Leu Ile Leu  
 180 185 190  
 Asn Lys Ser Asp Leu Val Pro Lys Glu Asn Leu Glu Ser Trp Leu Asn  
 195 200 205  
 Tyr Leu Lys Lys Glu Leu Pro Thr Val Val Phe Arg Ala Ser Thr Lys  
 210 215 220  
 Pro Lys Asp Lys Gly Lys Ile Thr Lys Arg Val Lys Ala Lys Lys Asn  
 225 230 235 240  
 Ala Ala Pro Phe Arg Ser Glu Val Cys Phe Gly Lys Glu Gly Leu Trp  
 245 250 255  
 Lys Leu Leu Gly Gly Phe Gln Glu Thr Cys Ser Lys Ala Ile Arg Val  
 260 265 270  
 Gly Val Ile Gly Phe Pro Asn Val Gly Lys Ser Ser Ile Ile Asn Ser  
 275 280 285  
 Leu Lys Gln Glu Gln Met Cys Asn Val Gly Val Ser Met Gly Leu Thr  
 290 295 300

## 4885

Arg Ser Met Gln Val Val Pro Leu Asp Lys Gln Ile Thr Ile Ile Asp  
305 310 315 320

Ser Pro Ser Phe Ile Val Ser Pro Leu Asn Ser Ser Ser Ala Leu Ala  
325 330 335

Leu Arg Ser Pro Ala Ser Ile Glu Val Val Lys Pro Met Glu Ala Ala  
340 345 350

Ser Ala Ile Leu Ser Gln Ala Asp Ala Arg Gln Val Val Leu Lys Tyr  
355 360 365

Thr Val Pro Gly Tyr Arg Asn Ser Leu Gly Ile Phe Tyr Xaa Ala Cys  
370 375 380

Ser Glu Lys Arg Tyr Ala Pro Lys Arg Trp Xaa Pro Lys Cys  
385 390 395

<210> 5528

<211> 78

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (59)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5528

Gln Ser Gly Arg Gly Gly Asp Arg Gly Arg Ser Lys Val Asp Thr Ser  
1 5 10 15

Ala Lys Pro Phe Ala Val Ile Ser Asp Cys Ala Val Ser Cys Pro Val  
20 25 30

His Gln Ser Pro Leu Val Phe Asp Val Gly Gln Cys Arg Gln His Asp  
35 40 45

4886

Leu Ala Gly Gln Xaa Leu Ile Tyr His Ser Xaa Asp Thr Ser Trp Ser  
 50 55 60

Leu Gly Ser Xaa His Pro Met Phe Pro Leu Phe Pro His Leu  
 65 70 75

&lt;210&gt; 5529

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5529

Glu Pro Ala Trp Gly Asp Cys Gln Val Ala Lys Gly Lys Glu Arg Val  
 1 5 10 15

Ala Asn Cys Leu Leu His Leu Ala Ala Gln Pro Gly Leu Pro Ala Phe  
 20 25 30

Lys Gly His Phe Phe Gly Gln Glu Leu Thr Arg Met Ser Pro Glu Ser  
 35 40 45

Ser Thr Pro Arg Val Cys Gly Asn His Pro Leu Leu Asn Thr Glu Ser  
 50 55 60

Cys Arg Ile Ile Val Gly Lys Glu Ala Thr Ser Ser Glu Ala Val Val  
 65 70 75 80

&lt;210&gt; 5530

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5530

Ala Val Thr Ser Leu Lys Ala Pro Val Ile Thr Leu Arg Ser Ser Ser  
 1 5 10 15

Ser Asn Cys His Pro Thr Ser Leu Ala Ser Cys Arg Lys Val Asn Leu  
 20 25 30

Asp Asn Thr Trp Leu Ser Phe Leu Thr Asn Ala Gly Ser Gly Arg Asn  
 35 40 45

Ser Leu Val Leu Lys Ser Lys Asn Thr Asn Cys Leu Arg Phe Ser Asn  
 50 55 60

4887

Thr Pro Met Lys Ala Ser His Pro Ser Leu Leu Thr Arg Phe Pro Ala  
65 70 75 80

Lys Phe Asn Cys Trp Lys Phe Phe Arg Gly Phe Phe Pro Lys Asn Ala  
85 90 95

Pro Lys Ile Leu Ile Ser Val Ser Val Ser Leu Gln Phe Phe Asn Pro  
100 105 110

Ser Leu Thr Ser Cys Gly Thr Ser Ser Lys Cys Phe Asn Lys Leu Leu  
115 120 125

Arg Leu Pro Cys Thr Ser Gln Pro Gln Gly Ser Ile Ser Ala Val Ser  
130 135 140

Cys Ser Ser Thr Phe Ile Leu Ser Ile Ser Ser  
145 150 155

<210> 5531

<211> 63

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5531

Ile Ile Val Ile Ile Gly Val Ser His His Ala Arg Pro Val Ser Ala  
1 5 10 15

Phe Ile Lys Ile Val His Ser Phe Ile His Ser Cys Ser Leu Lys Met  
20 25 30

Leu Phe Arg Lys Glu Phe Asp Lys Ile Asn Ile Ile Gln Asn Ser Lys  
35 40 45

Lys Lys Glu Xaa Ser Phe Cys Phe Ser His Lys Leu Gly Leu Leu  
50 55 60

<210> 5532

<211> 145

<212> PRT

<213> Homo sapiens

4888

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (95)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (100)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5532

Lys Gln Pro Pro Leu Gln Ser His Pro Pro Ser Gly Cys Gly Arg Pro  
 1 5 10 15

Gly Trp Pro Ala Glu Ala Pro Arg Pro Gly Leu His Pro Ser Ala Gln  
 20 25 30

Thr Thr Ala Gly Arg Ala Gly Val Gln Val Gly Gln Leu Pro Pro Phe  
 35 40 45

His Pro Ser Pro Pro Leu Leu Arg Pro His Gln Glu Gln Asp Pro Cys  
 50 55 60

Ala Ser Val Val Leu Pro Cys Leu Gln Ala Ala Cys Gly Pro Ala Val  
 65 70 75 80

Thr Gln Pro Gly Asp Thr Thr Ser Pro Gly Gly Leu Cys Ala Xaa Arg  
 85 90 95

His Leu Arg Xaa Trp Lys Pro Ser Cys Gly Arg Arg Leu Gly Glu Gly  
 100 105 110

Arg Arg Glu Gly Gly His Ala Ala Ser Val Ala Ser Thr Thr Leu Thr  
 115 120 125

Val Pro Trp Arg Trp Leu Ser Pro Asp Arg Gly Gln Thr His Arg Ala  
 130 135 140

Arg

145

&lt;210&gt; 5533

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5533

Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser Thr  
 1 5 10 15

4889

His Ala Ser Ala Asp Ala Trp Gly Lys Thr Phe Ala Arg Tyr Leu Ser  
                   20                  25                  30  
 Phe Arg Arg Asp Asn Asn Glu Leu Leu Phe Ile Leu Lys Gln Leu  
           35                  40                  45  
 Val Ala Glu Gln Val Thr Tyr Gln Arg Asn Arg Phe Gly Ala Gln Gln  
           50                  55                  60  
 Asp Thr Ile Glu Val Pro Glu Lys Asp Leu Val Asp Lys Ala Arg Gln  
           65                  70                  75                  80  
 Ile Asn Ile His Asn Leu Ser Ala Phe Tyr Asp Ser Glu Leu Phe Arg  
                   85                  90                  95  
 Met Asn Lys Phe Ser His Asp Leu Lys Arg Lys Met Ile Leu Gln Gln  
           100                  105                  110  
 Phe

&lt;210&gt; 5534

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5534

Phe Ser Gln His Ser Arg Leu Ala Val His Arg Arg Ile His Thr Gly  
           1                  5                  10                  15  
 Glu Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Val Phe Ser Asp Arg  
                   20                  25                  30  
 Ser Ala Phe Ala Arg His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr  
           35                  40                  45  
 Lys Cys Lys Glu Cys Gly Lys Val Phe Ser Gln Cys Ser Arg Leu Thr  
           50                  55                  60  
 Val His Leu Arg Ile His Ser Gly Glu Lys Pro Tyr Lys Cys Asn Glu  
           65                  70                  75                  80  
 Cys Gly Lys Val Tyr Ser Gln Tyr Ser His Leu Val Gly His Arg Arg  
                   85                  90                  95  
 Val His Thr Gly Glu Lys Pro Tyr Lys Cys His Glu Cys Gly Lys Ala  
           100                  105                  110

4890

Phe Asn Gln Gly Ser Thr Leu Asn Arg His Gln Arg Ile His Thr Gly  
115 120 125

Glu Lys Pro Tyr Lys Cys Asn Gln Cys Gly Asn Ser Phe Ser Gln Arg  
130 135 140

Val	His	Leu	Arg	Leu	His	Gln	Thr	Val	His	Thr	Gly	Asp	Arg	Pro	Tyr
145					150					155					160

Lys Cys Asn Glu Cys Gly Gln Asn Leu Leu Asn Gly Ala Gln Thr Ser  
165 170 175

Leu His Ile Arg  
180

<210> 5535

<211> 164

<212> PRT

<213> Homo sapiens

**<220>**

<221> SITE

<222> (102)

<223> Xaa equals any of the naturally occurring L-amino acids

**<220>**

<221> SITE

$\langle 222 \rangle$  (107)

<223> Xaa equals any of the naturally occurring L-amino acids

**<220>**

&lt;221&gt; SITE

<222> (151)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5535

Pro Arg Met Ala Thr Gln Arg Lys His Leu Val Lys Asp Phe Asn Pro  
1 5 10 15

Tyr Ile Thr Cys Tyr Ile Cys Lys Gly Tyr Leu Ile Lys Pro Thr Thr  
20 25 30

Val Thr Glu Cys Leu His Thr Phe Cys Lys Thr Cys Ile Val Gln His  
35 40 45

Phe Glu Asp Ser Asn Asp Cys Pro Arg Cys Gly Asn Gln Val His Glu  
50 55 60

Thr Asn Pro Leu Glu Met Leu Arg Leu Asp Asn Thr Leu Glu Glu Ile



## 4891

65		70		75		80
Ile Phe Lys Leu Val Pro Gly Leu Arg Glu Gln Glu Leu Glu Arg Glu						
	85			90		95
Ser Glu Phe Trp Lys Xaa Asn Lys Pro Gln Xaa Asn Gly Gln Asp Asp						
	100		105		110	
Thr Ser Lys Ala Asp Lys Pro Lys Val Asp Glu Glu Gly Asp Glu Asn						
	115		120		125	
Glu Asp Asp Lys Asp Tyr Pro Gln Glu Val Thr His Lys Leu Ala Ile						
	130		135		140	
Cys Leu Gly Cys Phe Thr Xaa Leu Met Gly Pro Phe Gly Gly His Val						
145		150		155		160
Gly Lys Gly Phe						

&lt;210&gt; 5536

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5536

Asn Ser Val Lys Phe Cys Leu Lys Lys Pro Leu Ile Glu Phe Glu Asn									
1		5				10			15
His Lys Pro Phe Gln Val Ser Leu Trp Val Cys Phe Gly Phe Phe Phe									
	20			25				30	
Phe Phe Leu Ser Leu Trp Pro Asn Val Arg Gly Ile Arg Phe Cys Lys									
	35			40			45		
Gln Ala Ala Val Ser Ile Ser									
	50			55					

&lt;210&gt; 5537

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (24)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

4892

&lt;400&gt; 5537

Ser Gly Pro Pro Gly Leu His Ser Arg Ser Ser Pro Ala Pro Ser Ala  
1 5 10 15

Ser Val Glu Pro Gln Ala Trp Xaa Arg Asp Glu Arg Asp Ala Ala Leu  
20 25 30

Ala Arg Gly Arg Pro Ser Ala Pro Lys Thr Arg Glu Gln Ala Pro Gly  
35 40 45

Glu Lys Pro Leu Glu Val Ser Trp Ser Arg Glu Ser Pro Val Ser Cys  
50 55 60

&lt;210&gt; 5538

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5538

Ala Phe Asp Gly Leu Ser Thr Ser Ser Ser Gln His Ile Leu Pro Ala  
1 5 10 15

Val Ala Ala Trp Leu Gly Leu Phe Phe Ser Tyr Pro Asn Pro Met Met  
20 25 30

Pro Gly Thr Leu Ile Thr Val Leu His Gln Leu Leu Tyr Phe Ser Val  
35 40 45

Tyr Phe His Asn Glu Leu Tyr Cys His Leu Asp Phe Glu Gln Leu Trp  
50 55 60

Glu Ile Glu Asp  
65

&lt;210&gt; 5539

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5539

Gln Glu Pro Pro Ile Met Ala Glu Gly Lys Gly Gly Val Ser Cys Leu  
1 5 10 15

## 4893

Thr Trp Pro Glu Gln Glu Val Glu Arg Gly Arg Cys His Thr Leu Thr  
                   20                  25                  30  
 Asn Asn Gln Ile Ser Gly Gln Leu Thr Gln Tyr Gln Glu Asn Ser Thr  
           35                  40                  45  
 Thr Lys Leu Trp Leu Ile Ile His Glu Lys Pro Pro Thr Thr Gln Ser  
       50                  55                  60  
 Pro Pro Thr Arg Pro Tyr Leu Gln His Leu Gly Leu Gln Phe Asn Met  
       65                  70                  75                  80  
 Arg Phe Gly Gly Asn Thr Asp Pro Asn His Ile Thr His Lys Leu Gln  
                   85                  90                  95  
 Leu Leu His Thr His Asp Asn Pro Leu Ile Cys Glu Gly Leu Ile Cys  
           100                  105                  110

Ser

<210> 5540  
 <211> 33  
 <212> PRT  
 <213> Homo sapiens

<400> 5540  
 Ser Arg Tyr Tyr Ser Glu Ala Cys Ile Leu Tyr Ala Ser Gly His Val  
       1                  5                  10                  15  
 Leu Ser Cys Glu Val Arg Cys Ile Ser Tyr Cys Gly Leu Gln Ser Lys  
           20                  25                  30

Phe

<210> 5541  
 <211> 63  
 <212> PRT  
 <213> Homo sapiens

<400> 5541  
 Gly Ala Asp Ser Ala Cys Pro Gly Pro Ala Lys Trp Leu Ser Ser Leu  
       1                  5                  10                  15  
 Arg Ala His Val Val Arg Thr Gly Ile Gly Gln Ala Arg Ala Lys Leu  
           20                  25                  30

4894

Phe Glu Lys Gln Ile Val Gln His Gly Gly Gln Leu Cys Pro Ala Gln  
                   35                                  40                                  45

Gly Pro Gly Val Thr His Ile Val Val Asp Glu Ala Trp Thr Met  
           50                                  55                                  60

&lt;210&gt; 5542

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5542

Met Ser Gln Ala Gly Asn Ser Glu Val Tyr Leu Ala Ile His Val Phe  
       1                                  5                                  10                                  15

Lys Met Ala Ala Ser Arg Arg Phe Thr Gly Val Pro Asp Arg Arg Gly  
                   20                                  25                                  30

Gly Gly Ala Gln Ala Arg Met Lys Leu Glu Leu Ala Arg Ser Arg Lys  
           35                                  40                                  45

Thr Ile Ala Gly Gly Thr Ala Ser Val Gly Ala Glu Glu Thr  
       50                                  55                                  60

&lt;210&gt; 5543

&lt;211&gt; 317

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5543

Gly Gly Pro Met Lys Asp Cys Glu Tyr Ser Gln Ile Ser Thr His Ser  
       1                                  5                                  10                                  15

Ser Ser Pro Met Glu Ser Pro His Lys Lys Lys Lys Ile Ala Ala Arg  
                   20                                  25                                  30

Arg Lys Trp Glu Val Phe Pro Gly Arg Asn Lys Phe Phe Cys Asn Gly  
           35                                  40                                  45

Arg Ile Met Met Ala Arg Gln Thr Gly Val Phe Tyr Leu Thr Leu Val  
       50                                  55                                  60

Leu Ile Leu Val Thr Ser Gly Leu Phe Phe Ala Phe Asp Cys Pro Tyr  
       65                                  70                                  75                                  80

Leu Ala Val Lys Ile Thr Pro Ala Ile Pro Ala Val Ala Gly Ile Leu

4895

85					90					95						
Phe	Phe	Phe	Val	Met	Gly	Thr	Leu	Leu	Arg	Thr	Ser	Phe	Ser	Asp	Pro	
			100					105						110		
Gly	Val	Leu	Pro	Arg	Ala	Thr	Pro	Asp	Glu	Ala	Ala	Asp	Leu	Glu	Arg	
			115					120						125		
Gln	Ile	Asp	Ile	Ala	Asn	Gly	Thr	Ser	Ser	Gly	Gly	Tyr	Arg	Pro	Pro	
			130					135						140		
Pro	Arg	Thr	Lys	Glu	Val	Ile	Ile	Asn	Gly	Gln	Thr	Val	Lys	Leu	Lys	
					150					155						160
Tyr	Cys	Phe	Thr	Cys	Lys	Ile	Phe	Arg	Pro	Pro	Arg	Ala	Ser	His	Cys	
				165					170						175	
Ser	Leu	Cys	Asp	Asn	Cys	Val	Glu	Arg	Phe	Asp	His	His	Cys	Pro	Trp	
			180					185						190		
Val	Gly	Asn	Cys	Val	Gly	Lys	Arg	Asn	Tyr	Arg	Phe	Phe	Tyr	Met	Phe	
			195					200						205		
Ile	Leu	Ser	Leu	Ser	Phe	Leu	Thr	Val	Phe	Ile	Phe	Ala	Phe	Val	Ile	
			210					215						220		
Thr	His	Val	Ile	Leu	Arg	Ser	Gln	Gln	Thr	Gly	Phe	Leu	Asn	Ala	Leu	
					230					235						240
Lys	Asp	Ser	Pro	Ala	Ser	Val	Leu	Glu	Ala	Val	Val	Cys	Phe	Phe	Ser	
				245					250						255	
Val	Trp	Ser	Ile	Val	Gly	Leu	Ser	Gly	Phe	His	Thr	Tyr	Leu	Ile	Ser	
				260				265						270		
Ser	Asn	Gln	Thr	Thr	Asn	Glu	Asp	Ile	Lys	Gly	Ser	Trp	Ser	Asn	Lys	
			275					280						285		
Arg	Gly	Lys	Glu	Asn	Tyr	Asn	Pro	Tyr	Ser	Tyr	Gly	Asn	Ile	Phe	Thr	
			290					295						300		
Asn	Cys	Cys	Val	Ala	Leu	Cys	Gly	Pro	Ser	His	Gln	Ala				
			305					310						315		

<210> 5544

<211> 76

<212> PRT

<213> Homo sapiens

## 4896

&lt;400&gt; 5544

Ile Val Gly Leu Phe His Met Cys Ser Leu Lys Tyr Leu Asn Asn His  
 1 5 10 15

Ser Phe His Ser Leu Phe Ser Ser Gln Ala Phe Ser Arg Ser Ser Met  
 20 25 30

Trp Ile Leu Lys Asp Leu Pro Ser Leu Thr Arg Ile Thr Phe Lys Gly  
 35 40 45

Asp Cys Phe Lys Ile Phe Leu Gln Ile Glu Ile Arg Thr Glu Arg Leu  
 50 55 60

Arg Asn Ile Val Tyr Phe Ala Lys Thr Arg Cys Leu  
 65 70 75

&lt;210&gt; 5545

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5545

Glu Thr Leu Val Asn Trp Ser Thr Gly Glu Ser Tyr Lys Trp Pro Met  
 1 5 10 15

Ser Gln Lys Ser Trp Asp Leu Leu Pro Ala Ala Ala Asp Ala Asp Arg  
 20 25 30

Pro Trp Glu Ala Ala Val Leu Trp Arg Ser Trp Ser Ser Ser Phe Leu  
 35 40 45

Gly Leu Ala Trp Leu Pro Gln Lys Glu Gln Ser Gly Leu Glu Gly Ser  
 50 55 60

Ile Lys Phe Tyr Thr His Lys Leu Gln Leu Glu Val Ser Phe Leu Lys  
 65 70 75 80

Cys Pro Ala Phe Ala Gln Leu Phe Gln Ile Ile Ser Phe Leu Arg Leu  
 85 90 95

Trp Gln Val Ser Cys Pro Pro Ser Tyr Ser Ser Val Phe Thr Ser Ser  
 100 105 110

Arg Gln Gln Ser Gly  
 115

&lt;210&gt; 5546

4897

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5546

Val	Gln	Ile	Asn	His	Pro	Asp	Leu	Lys	Val	Asn	Thr	Phe	Tyr	Phe	Ser
1				5					10					15	

Phe	Arg	Ser	Ile	Thr	Glu	Tyr	Ala	Ala	Phe	Arg	Tyr	Arg	Phe	Asn	Leu
			20					25					30		

Pro	Asp	Phe	Leu	Lys	Ile	Leu	Tyr	Phe	Tyr	Ile	Ala	Thr	Thr	Gly	Leu
		35					40					45			

Leu	Asn	Met	Gln	Leu	Asn	Cys	Tyr	Leu	Asn	Lys	Leu	His	Leu	Met	Glu
	50					55					60				

Lys	Lys	Lys
65		

&lt;210&gt; 5547

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (115)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5547

Asn	Ile	Glu	Gln	Glu	Asn	Glu	Lys	Leu	Lys	Ala	Glu	Leu	Glu	Lys	Leu
1				5					10					15	

Lys	Ala	His	Leu	Gly	His	Gln	Leu	Ser	Met	His	Tyr	Glu	Ser	Lys	Thr
			20					25					30		

Lys	Gly	Thr	Glu	Lys	Ile	Ile	Ala	Glu	Asn	Glu	Arg	Leu	Arg	Lys	Glu
		35					40					45			

Leu	Lys	Lys	Glu	Thr	Asp	Ala	Ala	Glu	Lys	Leu	Arg	Ile	Ala	Lys	Asn
	50					55					60				

Asn	Leu	Glu	Ile	Leu	Asn	Glu	Lys	Met	Thr	Val	Gln	Leu	Glu	Glu	Thr
65					70					75				80	

Gly	Lys	Arg	Leu	Gln	Phe	Ala	Glu	Ser	Arg	Gly	Pro	Gln	Leu	Glu	Gly
				85					90					95	

## 4898

Ala Asp Ser Lys Ser Trp Lys Ser Ile Val Val Thr Arg Met Tyr Glu  
 100 105 110  
 Thr Lys Xaa Lys Glu Leu Glu Thr Asp Ile Ala Lys Lys Asn Gln Ser  
 115 120 125  
 Ile Thr Asp Leu Lys Gln Leu Val Lys Glu Ala Thr Glu Arg Glu Gln  
 130 135 140  
 Lys Val Asn Lys Tyr Asn Glu Asp Leu Glu Gln Gln Ile Lys Ile Leu  
 145 150 155 160  
 Lys His Val Pro Glu Gly Ala Glu Thr Glu Gln Gly Leu Lys Arg Glu  
 165 170 175  
 Leu Gln Val Leu Arg Leu Ala Asn His Gln Leu Asp Lys Glu Lys Ala  
 180 185 190  
 Glu Leu Ile His Gln Ile Glu Ala Asn Lys Asp Gln Ser Gly Ala Glu  
 195 200 205  
 Ser Thr Ile Pro Asp Ala Asp Gln Leu Lys Glu Lys Ile Lys Asp Leu  
 210 215 220  
 Glu Thr Gln Leu Lys Met Ser Asp Leu Glu Lys Gln His Leu Lys Glu  
 225 230 235 240  
 Glu Ile Lys Lys Leu Lys Lys Glu Leu Glu Asn Phe Asp Pro Ser Phe  
 245 250 255  
 Phe Glu Glu Ile Glu Asp Leu Lys Tyr Asn Tyr Lys Glu Glu Val Lys  
 260 265 270  
 Lys Asn Ile Leu Leu Glu Glu Lys Val Lys Lys Leu Ser Glu Gln Leu  
 275 280 285  
 Gly Val Glu Leu Thr Ser Pro Val Ala Ala Ser Glu Glu Phe Glu Asp  
 290 295 300  
 Glu Glu Glu Ser Pro Val Asn Phe Pro Ile Tyr  
 305 310 315

&lt;210&gt; 5548

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5548

Gln Leu Asn Thr Ser Ser Thr Asn His Gln Leu Pro Ser Glu His Gln



4899

1	5	10	15
Thr Ile Leu Ser Ser Arg Asp Ser Arg Asn Ser Leu Arg Ser Asn Phe	20	25	30
Ser Ser Arg Glu Ser Glu Ser Ser Arg Ser Asn Thr Gln Pro Gly Phe	35	40	45
Ser Tyr Ser Ser Ser Arg Asp Glu Ala Pro Ile Ile Ser Asn Ser Glu	50	55	60
Arg Val Val Ser Ser Gln Arg Pro Phe Gln Glu Ser Ser Asp Asn Glu	65	70	75
Gly Arg Arg Thr Thr Arg Arg Leu Leu Ser Arg Ile Ala Ser Ser Met	85	90	95
Ser Ser Thr Phe Phe Ser Arg Arg Ser Ser Gln Asp Ser Leu Asn Thr	100	105	110
Arg Ser Leu Asn Ser Glu Asn Ser Tyr Val Ser Pro Arg Ile Leu Thr	115	120	125
Ala Ser Gln Ser Arg Ser Asn Val Pro Ser Ala Ser Glu Val Pro Asp	130	135	140
Asn Arg Ala Ser Glu Ala Ser Gln Gly Phe Arg Phe Leu Arg Arg Arg	145	150	155
Trp Gly Leu Ser Ser Leu Ser His Asn His Ser Ser Glu Ser Asp Ser	165	170	175
Glu Asn Phe Asn Gln Glu Ser Glu Gly Arg Asn Thr Gly Pro Trp	180	185	190

&lt;210&gt; 5549

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (57)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5549

Ala Asn Thr Ser Thr Arg Ala Ala Leu Tyr Cys Leu Phe Leu Ser Phe	1	5	10	15
---	---	---	----	----

## 4900

Ile Met Phe Ala Ser Val Leu Gln Ile Asn Pro Arg Ser Trp Leu Met  
                   20                  25                  30

Lys Lys Val Ile Thr Val Leu Ala Ala Cys Leu Glu Ser Glu Asn Gln  
                   35                  40                  45

Asn Ala Gln Arg Ile Gly Ala Ala Xaa Leu Trp Ala Leu Ile Tyr Asn  
                   50                  55                  60

Tyr Gln Lys Ala Lys Thr Ala Leu Lys Ser Pro Ser Val Lys Arg Arg  
                   65                  70                  75                  80

Val Asp Glu Ala Tyr Ser Leu Ala Lys Lys Thr Phe Pro Asn Ser Glu  
                                   85                  90                  95

Ala Asn Pro Leu Asn Ala Tyr Tyr Leu Lys Cys Leu Glu Asn Leu Val  
                   100                  105                  110

Gln Leu Leu Asn Ser Ser Leu Ser Ala His Gly Met Pro Thr Pro  
                   115                  120                  125

<210> 5550

<211> 89

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (57)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5550

Leu Asn His Leu Gln Asn Ala Ser Thr Pro Gly Tyr Ser Lys Leu Pro  
           1                  5                  10                  15

Phe Gln Ile His Phe Gln Thr Ala Leu Thr Trp Ala Ser His Trp Xaa  
                   20                  25                  30

Ser Trp Leu Leu Val Gly Ala Ile Ser Cys Val Asp Pro Gln Val Arg  
                   35                  40                  45

Gly Pro Gly Pro Pro Ala Pro Pro Xaa Gln Arg Gly Glu Pro Ala Gln  
                   50                  55                  60

## 4901

Phe Phe Trp Ser Leu Lys Cys Val Pro Leu Leu Val Ala Arg Ser Pro  
 65 70 75 80

Gln Trp Gly Gly Leu Thr Arg Thr Arg  
 85

<210> 5551

<211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (84)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5551

Ala Arg Gln Val Lys Ser Leu Arg Asp Pro Ser Ala Lys Met Ser Lys  
 1 5 10 15

Ser Asp Pro Asp Lys Leu Ala Thr Val Arg Ile Thr Asp Ser Pro Glu  
 20 25 30

Glu Ile Val Gln Lys Phe Arg Lys Ala Val Thr Asp Phe Thr Ser Glu  
 35 40 45

Val Thr Tyr Asp Pro Ala Gly Arg Ala Gly Val Ser Asn Ile Val Ala  
 50 55 60

Val His Ala Ala Val Thr Gly Leu Ser Val Glu Glu Val Val Arg Arg  
 65 70 75 80

Xaa Ala Gly Xaa Glu His Cys Ser Leu Gln Ala Gly Arg Gly Arg Cys  
 85 90 95

Cys Asp

<210> 5552

<211> 74

<212> PRT

<213> Homo sapiens

4902

&lt;400&gt; 5552

Thr Glu Glu Val Asp Ser Val Ala Val Ser Val Leu Ala Leu Gly Ser  
1 5 10 15

Arg Ile Gly Glu Leu Arg Ala Pro Ile Trp Asp Glu Glu Ser Arg Lys  
20 25 30

Gln Leu Ser Ile Ser Ile Lys Arg Ala Glu Gln Pro Leu Ser Leu His  
35 40 45

Pro Pro Ser Ala Leu Phe Ser Leu Pro Pro Ser Leu Leu Ser Phe His  
50 55 60

Ser Val Tyr Val Ser Phe Gly Pro Ile Pro  
65 70

&lt;210&gt; 5553

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5553

Gly Thr Gly Ser Gln Cys Thr Gln His Gly Ala Ile Ser Asp Val Ile  
1 5 10 15

Gln Arg Met Arg Gln Asp Lys Ser Tyr Cys Leu Ile Lys Gly Lys Leu  
20 25 30

Gly Thr Gly Met Leu Phe Lys Leu Arg Lys Ile Phe Trp Gly Val Lys  
35 40 45

Leu Asp Ser Thr Glu Ser Leu Glu Lys Leu Ala Trp Arg Glu Lys Arg  
50 55 60

His  
65

&lt;210&gt; 5554

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

## 4903

<220>  
 <221> SITE  
 <222> (26)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (42)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (45)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (54)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (75)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5554  
 Ala Pro Thr Asn Leu Phe Phe Phe Phe Phe Phe Glu Thr Glu Ser Gly  
           1                  5                  10                  15  
 Cys Ala Ser His Phe Leu Ser Phe Xaa Xaa Ser Glu Leu Thr Glu Gln  
                   20                  25                  30  
 Pro Gly Arg Cys Gly Phe Arg Ser Leu Xaa Leu Ser Xaa Cys Ala Lys  
                   35                  40                  45  
 Cys Trp Gly Arg Arg Xaa Gln Arg Val Asp Ser Gly Met Val Pro Ala  
           50                  55                  60  
 Ala Ser His Phe Tyr Ala Lys Pro Asp Phe Xaa Ser His Pro Gly Gly  
           65                  70                  75                  80  
 Gln Phe

<210> 5555  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens

4904

&lt;400&gt; 5555

Ile Phe Ile Ile Glu Val Ser Phe Pro Leu Gly Ile Ser Leu Ser Leu  
 1 5 10 15

Phe Phe Phe Asn Glu Asn Gln Ser Thr Glu Tyr Phe Val Ser Pro Arg  
 20 25 30

Lys Thr Pro Gln Leu Ser Ile Met Leu Ser Thr Arg Glu Lys Leu  
 35 40 45

&lt;210&gt; 5556

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (103)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5556

Gly Asn Cys Gln Lys Cys Ala Phe Gly Tyr Ser Gly Leu Asp Cys Lys  
 1 5 10 15

Asp Lys Phe Gln Leu Ile Leu Thr Ile Val Gly Thr Ile Ala Gly Ile  
 20 25 30

Val Ile Leu Ser Met Ile Ile Ala Leu Ile Val Thr Ala Arg Ser Asn  
 35 40 45

Asn Lys Thr Lys His Ile Glu Glu Glu Asn Leu Ile Asp Glu Asp Phe  
 50 55 60

Gln Asn Leu Lys Leu Arg Ser Thr Gly Phe Thr Asn Leu Gly Ala Glu  
 65 70 75 80

Gly Ser Val Phe Pro Lys Val Arg Ile Thr Ala Ser Arg Asp Ser Gln  
 85 90 95

Met Gln Asn Pro Tyr Ser Xaa His Ser Ser Met Pro Arg Pro Asp Tyr  
 100 105 110

&lt;210&gt; 5557

## 4905

<211> 152  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (143)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (147)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (151)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5557

Phe Thr Ala Arg Ser Pro Trp Glu Tyr Thr Asn Leu Cys Ser Arg Gln  
 1 5 10 15

Leu Gly Ala Ser Leu Leu Glu Thr Val Leu Ile Phe Phe Phe Leu Ser  
 20 25 30

Glu Phe Gln Leu Ile Leu Thr Ile Val Gly Thr Ile Ala Gly Ile Val  
 35 40 45

Ile Leu Ser Met Ile Ile Ala Leu Ile Val Thr Ala Arg Ser Asn Asn  
 50 55 60

Lys Thr Lys His Ile Glu Glu Glu Asn Leu Ile Asp Glu Asp Phe Gln  
 65 70 75 80

Asn Leu Lys Leu Arg Ser Thr Gly Phe Thr Asn Leu Gly Ala Glu Gly  
 85 90 95

Ser Val Phe Pro Lys Val Arg Ile Thr Ala Ser Arg Asp Ser Gln Met  
 100 105 110

Gln Asn Pro Tyr Ser Ser His Thr Gln Lys Lys Lys Lys Lys Lys Lys  
 115 120 125

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Xaa Lys  
 130 135 140

Lys Lys Xaa Lys Lys Lys Xaa Gly  
 145 150

4906

&lt;210&gt; 5558

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5558

Phe	Phe	Phe	Xaa	Val	Xaa	Glu	Lys	Ser	Ile	Leu	Leu	Val	Ser	Leu	Xaa
1				5					10					15	

Val	Cys	Leu	Val	Leu	Ser	Glu	Ile	Pro	Phe	Met	Ser	Thr	Trp	Phe	Leu
		20					25						30		

Leu	Val	Ser	Thr	Phe	Ser	Met	Leu	Pro	Leu	Leu	Xaa	Lys	Asp	Glu	Leu
		35					40					45			

Leu	Met	Pro	Ser	Val	Val	Thr	Thr	Met	Ala	Phe	Phe	Ile	Ala	Cys	Val
	50					55					60				

Thr	Ser	Phe	Ser	Ile	Phe	Glu	Lys	Thr	Ser	Glu	Glu	Glu	Leu	Gln	Leu
65				70					75					80	

Lys	Ser	Phe	Ser	Ile	Ser	Val	Arg	Lys	Tyr	Leu	Pro	Cys	Phe	Thr	Phe
				85				90						95	

Leu	Ser	Arg	Ile	Ile	Gln	Tyr	Leu	Phe	Leu	Ile	Ser	Val	Ile	Thr	Met
		100						105					110		

Val	Leu	Leu	Thr	Leu	Met	Thr	Val	Thr	Leu	Asp	Pro	Pro	Gln	Lys	Leu
		115					120					125			



## 4907

Pro Asp Leu Phe Ser Val Leu Val Cys Phe Val Ser Cys Leu Asn Phe  
 130 135 140

Leu Phe Phe Leu Val Tyr Phe Asn Ile Ile Ile Met Trp Asp Ser Lys  
 145 150 155 160

Ser Gly Arg Asn Gln Lys Lys Ile Ser  
 165

<210> 5559

<211> 67

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5559

Gly Trp Arg His Gly Gly Glu His His Gln Asp His Val Glu Leu Gly  
 1 5 10 15

Arg Asp Cys Pro Pro Lys Lys Asn Ile Gly Pro Leu Gln Ala Gln Pro  
 20 25 30

Pro Leu Pro Leu Glu Phe Phe Ser Gln Ala Gln Cys Gln Lys Phe Ser  
 35 40 45

Leu Gly Trp Xaa Gln Ile Cys Xaa Thr Gly Phe Pro Xaa Ser Ser Thr  
 50 55 60

Leu Pro Pro  
 65

<210> 5560

<211> 115

4908

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (109)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5560

Ser Ser Lys Cys Gly Phe Ser Cys Ile Ser Gln Ile Gly Arg Pro Gly  
 1 5 10 15

Val Val Gly Val Pro Gly Gly Arg Leu Trp Ala Gly Ser Gln Asp Pro  
 20 25 30

Pro Phe Leu Gly Gly Asp Arg Ala Cys Gly Ala Ala Pro Arg Asn Val  
 35 40 45

Arg Arg Lys Arg Glu Arg Ala Leu Ala Pro Ser Ala Ser Cys Leu Arg  
 50 55 60

Cys Trp Arg Leu Pro Ile Arg Trp Phe Tyr Pro Gln Thr Pro Gly His  
 65 70 75 80

Arg Glu Ser Arg Arg Lys Gly Gln Pro Arg Ile Pro Ala Gly Phe Leu  
 85 90 95

His Arg Gly Ala Ser Gln Phe Leu His Leu Ile Phe Xaa Ser Cys Gly  
 100 105 110

Arg Cys Tyr  
 115

&lt;210&gt; 5561

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (137)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (142)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

## 4909

<221> SITE  
 <222> (171)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (179)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (193)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (197)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (210)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 5561  
 Glu Glu Ala Ala Lys Ala Ala Gly Thr His Phe Thr Ser Gln Gln Leu  
 1 5 10 15  
 Gln Glu Leu Glu Ala Thr Phe Gln Arg Asn Arg Tyr Pro Asp Met Ser  
 20 25 30  
 Thr Arg Glu Glu Ile Ala Val Trp Thr Asn Leu Thr Glu Ala Arg Val  
 35 40 45  
 Arg Val Trp Phe Lys Asn Arg Arg Ala Lys Trp Arg Lys Arg Glu Arg  
 50 55 60  
 Asn Gln Gln Ala Glu Leu Cys Lys Asn Gly Phe Gly Pro Gln Phe Asn  
 65 70 75 80  
 Gly Leu Met Gln Pro Tyr Asp Asp Met Tyr Pro Gly Tyr Ser Tyr Asn  
 85 90 95  
 Asn Trp Ala Ala Lys Gly Leu Thr Ser Ala Ser Leu Ser Thr Lys Ser  
 100 105 110  
 Phe Pro Phe Phe Asn Ser Met Asn Val Asn Pro Leu Ser Ser Gln Ser  
 115 120 125  
 Met Phe Ser Pro Pro Asn Ser Ile Xaa Ser Met Ser Met Xaa Ser Ser  
 130 135 140

## 4910

Met Val Pro Ser Ala Val Thr Gly Val Pro Gly Ser Ser Leu Asn Ser  
 145 150 155 160

Leu Asn Asn Leu Asn Asn Leu Ser Ser Pro Xaa Leu Asn Ser Ala Val  
 165 170 175

Pro Thr Xaa Ala Cys Pro Tyr Ala Pro Pro Thr Ser Ser Val Cys Leu  
 180 185 190

Xaa Gly His Val Xaa Ser Ser Leu Ala Ser Leu Arg Leu Lys Ala Lys  
 195 200 205

Gln Xaa  
 210

<210> 5562

<211> 101

<212> PRT

<213> Homo sapiens

<400> 5562

Thr Leu Thr Val Gln Val Val His Cys Asn Glu Val Thr His Ile Cys  
 1 5 10 15

Trp Leu His Lys Leu Gln Val Leu Leu Ser Gln Tyr Gly Thr Leu Asn  
 20 25 30

Cys Asp Val Val Gln Gln Leu Pro Ala Ser Ser Gln Leu Ile Arg Cys  
 35 40 45

Glu Tyr Phe Gly Leu Asp Leu Gln Pro Asp Ala Val Leu Gln Pro Lys  
 50 55 60

Lys Lys Val Glu Pro Met Ile Lys Asn Cys Ser Gln Asp Glu Pro Gly  
 65 70 75 80

Lys Lys Ser Ala Lys Leu Pro Trp Arg Ser Ala Gly Thr Leu Val Met  
 85 90 95

Thr Gly Ile Thr Pro  
 100

<210> 5563

<211> 117

<212> PRT

<213> Homo sapiens

4911

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (94)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5563

Ile	Pro	Pro	Ala	Gln	Leu	Trp	Gln	Arg	Leu	Leu	Ala	Leu	Val	Ile	Ser
1				5					10					15	

Ser	Ile	Ile	Gln	Ile	His	Tyr	His	Pro	Asn	Pro	Ser	Pro	Ile	Phe	Gly
			20					25					30		

Leu	Gly	Glu	Lys	Asn	Met	Asn	Tyr	Asp	Asp	Arg	Thr	Ser	Ser	Lys	Pro
		35					40					45			

Ser	Pro	Val	Leu	Ser	Glu	Tyr	Pro	Phe	Trp	Gly	Cys	Ile	Pro	Gln	Lys
	50					55					60				

Pro	Ile	Trp	Gly	Pro	Ile	Ser	Met	Tyr	Thr	Glu	Leu	Lys	Phe	Gln	Val
65					70					75					80

Pro	Leu	Cys	Ile	Lys	Arg	Ser	Gln	Asn	Phe	Gly	Gln	Ala	Xaa	Gly	Thr
				85					90					95	

Leu	Lys	Ser	His	Gln	Cys	Asn	Tyr	Thr	Leu	Glu	Ile	Ile	Asn	Pro	Ser
			100					105					110		

His	Asp	Tyr	Ile	Ser
			115	

&lt;210&gt; 5564

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5564

Leu	Pro	Val	Phe	Glu	Asp	Val	Gly	Arg	Val	Cys	Lys	Tyr	Ser	Ala	Phe
1				5					10					15	

Pro	Leu	Thr	His	Ala	Gly	Glu	Asp	Ala	Ser	Ser	Leu	Ala	Pro	Ala	Val
			20					25					30		

Arg	Ala	Gln	Ile	Ala	Arg	Val	Lys	Thr	Ser	Ser	Leu	Gly	Arg	Glu	Val
		35					40					45			

Cys	Arg	Gly	Leu	Glu	Val	Ile
	50					55

4912

&lt;210&gt; 5565

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5565

Lys Leu Lys Glu Ile Lys Lys Leu Leu Glu Glu Asn Ala Gly Ile Asn  
1 5 10 15

Leu Tyr Asp Leu Arg Leu Gly Ser Gly Phe Leu Asp Met Thr Pro Lys  
20 25 30

Ala Lys Gln Gln Lys Lys Glu Asn Leu Lys Trp Met Ser Ser Glu  
35 40 45

&lt;210&gt; 5566

&lt;211&gt; 36

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (18)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5566

Gly Pro Val Leu His Gln Arg Ile Leu Ile Ser Ala Ser Gly Val Gly  
1 5 10 15

Glu Xaa Arg Xaa Ile Tyr Ile Gly Gln Asn Arg Gly Val Glu Gln Asp  
20 25 30

Tyr Ser Ile Phe  
35

&lt;210&gt; 5567

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

4913

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5567

Pro Gly Ala Val Val Gly Val Xaa Arg Val Met Thr Trp Ser Gly Trp  
 1 5 10 15

Ala Trp Ala Asp Val His Ile Val Cys Thr Leu Asp Pro Trp Pro Arg  
 20 25 30

Arg Thr Gln Ile Leu Thr Ser Arg Asn Phe His Leu Met Asn Ile Met  
 35 40 45

Arg Ile Gly Gly Lys Glu Asn Ser Leu Tyr Arg Ile Asn Pro Ser Phe  
 50 55 60

Leu Gln Gly  
 65

&lt;210&gt; 5568

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5568

Glu Asn Ala Phe Gln Asp Leu Ser Ser Thr His Pro Leu Ser Leu Pro  
 1 5 10 15

Gln Pro His Ile Trp Gly His Asn Ser Thr Cys Val Lys Asp Asn Leu  
 20 25 30

Leu Leu Phe Thr Glu Pro Pro Gly Ile Gln Asp Asn Lys Xaa Leu His  
 35 40 45

Xaa Asp Gln Gln Val Ser Phe Ser Ala Pro Ser Phe Ile Thr Pro Phe  
 50 55 60

## 4914

Phe Pro Ser Glu Val His Thr His Pro Tyr Met Ala Ala Val Gly Ile  
 65 70 75 80

Ser Thr Gly

<210> 5569  
 <211> 58  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (39)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5569  
 Met Val Leu Ser Pro Ser Gly Val Ser Lys Cys Ile Arg Lys Gln Asn  
 1 5 10 15

Ser Val Val Ser His Ser Ser Leu Cys Ala Arg Cys Leu Arg Arg Gly  
 20 25 30

Ser Tyr Arg Ser Pro Arg Xaa Asn Gln Ala His Leu Ser Leu Gly Val  
 35 40 45

Gly Gln Ser Gly Lys Ala Phe Trp Lys Met  
 50 55

<210> 5570  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (90)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (97)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5570  
 Ser His Thr Thr Lys Asn Thr Asp Phe Thr Asp Leu Val Leu Glu Asn  
 1 5 10 15



## 4915

His Tyr Thr Asn Ser Asn Asn Asn Ala Pro Gly Thr Lys Gly Glu Glu  
                   20                  25                  30  
 Met Ser Ser Arg Val Gly Ile Leu Phe Lys Cys Leu Val Phe Asn Lys  
           35                  40                  45  
 Asn Asn Tyr Lys Thr Gln Ser Lys Thr Arg Lys Tyr Gly Pro Tyr Pro  
       50                  55                  60  
 Gly Lys Asn Lys Gln Pro Ile Glu Ala Val Leu Glu Glu Val Asn Ile  
   65                  70                  75                  80  
 Leu Asp Leu Leu Glu Asn Asp Phe Asn Xaa Ser Ile Ile Asn Met Phe  
                   85                  90                  95  
 Xaa Lys Leu Lys Glu Ala Arg Cys Gly Gly Ser Arg Leu  
           100                  105

<210> 5571  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

<400> 5571  
 Asn Asp Asn Lys Gly Phe Arg Thr Ile Thr Ala Ser Ala Pro Gly Pro  
   1                  5                  10                  15  
 Thr Pro Ser Ser Glu Arg Arg Ser Val Val Gly Asn Met Leu Ser Asn  
           20                  25                  30  
 Ser Val Thr Cys Tyr Arg Gly Ile Phe Gly Glu Arg Lys Ser Gln Cys  
           35                  40                  45  
 Gly Lys Leu His Cys Cys Leu Ile Leu Ile Ala Thr Ala Thr Ser Thr  
       50                  55                  60  
 Phe Ser Asn His His Pro Asp Ser Val Ser Ser His Gln His Gln Gly  
   65                  70                  75                  80  
 Glu Thr Leu Tyr His Gln Lys Asp Tyr Asn Leu Leu Lys Ala Gln Met  
           85                  90                  95  
 Ile Ile Ser Ile Phe  
           100

<210> 5572

## 4916

<211> 40  
<212> PRT  
<213> Homo sapiens

<400> 5572

Asp Arg His Ala Leu Gln Ile Phe Leu Tyr Lys Ser Gly Ser Leu Phe  
1 5 10 15

Pro Ile Val Leu Thr Leu Arg Leu Ser Val Gly Leu Pro Ile Arg Phe  
20 25 30

Thr Ala Val Gln Val His Lys Met  
35 40

<210> 5573  
<211> 59  
<212> PRT  
<213> Homo sapiens

<400> 5573

Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser Thr His  
1 5 10 15

Ala Ser Ala Lys Ile Arg Thr Ala His Arg Arg Val Met Ile Leu Asn  
20 25 30

His Pro Asp Lys Gly Gly Ser Pro Tyr Val Ala Ala Lys Ile Asn Glu  
35 40 45

Ala Lys Asp Leu Leu Glu Thr Thr Thr Lys His  
50 55

<210> 5574  
<211> 51  
<212> PRT  
<213> Homo sapiens

<400> 5574

Ser Lys Asp Leu Val Phe Phe Thr Gln His Val Ser Arg Ile His Lys  
1 5 10 15

Phe Tyr Cys Phe Ile Ala Val Ile Phe Ile Asp Val Tyr Phe Ile Val  
20 25 30

Gly Leu Tyr Asn Ile Leu Leu Arg Asn Thr Tyr Ile Tyr Asn Lys Leu  
35 40 45

## 4917

Tyr Ile Phe  
50

<210> 5575

<211> 60

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5575

Tyr Cys Ser Phe Ser Ser Phe Phe Ala Val Ala Ser Ser Ser Leu Val  
1 5 10 15

Lys Thr Leu Lys Lys Asn Thr Ala Leu Pro Trp Glu Ile Ile Thr Leu  
20 25 30

Pro Asn Thr Pro Leu Val Gly Asn Lys Arg Phe Tyr Gly Thr Xaa Xaa  
35 40 45

Lys Lys Xaa Ser Thr Cys Pro Phe Phe Leu Pro Val  
50 55 60

<210> 5576

<211> 72

<212> PRT

<213> Homo sapiens

<400> 5576

Ser Ser Gln Ile Lys Pro Pro Glu Ser Pro His Tyr Lys Ile Gln Ser  
1 5 10 15

Tyr His Ala Ser Leu Pro Ser Val Tyr Lys Ile Cys Pro Ser Leu Gln  
20 25 30

4918

Leu Gly Glu Thr Asp Leu Gly Gln Thr Pro Val Ser Leu Leu Gly Cys  
35 40 45

Leu Ala Ile Asn Phe Ser Leu Tyr Lys Thr Pro Val Leu Gln Cys Leu  
50 55 60

Val Phe Gln Cys Glu Pro Gly Asn  
65 70

&lt;210&gt; 5577

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (37)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5577

Val Leu Asn Lys Ser Leu Leu Tyr Glu Asn Lys Gln Tyr Phe Leu Tyr  
1 5 10 15

Leu Ser Phe Gly Cys Ile Phe Pro Tyr Phe Val Ile Ser Phe Phe Leu  
20 25 30

Thr Phe Tyr Xaa Xaa Ile Leu Thr Leu Phe Leu Ser Phe Ala Ser Val  
35 40 45

Phe Pro Arg Arg Val Leu Trp Leu Lys Cys Ile Thr Cys Lys Ile Glu  
50 55 60

&lt;210&gt; 5578

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

## 4919

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5578

Met Asp Xaa Gln Thr Asn Gly Thr Lys Leu Arg Ser Gln Ile Glu Ile

1

5

10

15

Asn Gln Ser Val Asp Leu Leu Ile Tyr Gly Asn Val Phe Cys Glu Ile

20

25

30

Tyr Gln Leu Met Gly Lys Arg Leu Phe Lys Thr

35

40

&lt;210&gt; 5579

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (69)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (70)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (118)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (123)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (127)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (129)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

## 4920

<220>  
 <221> SITE  
 <222> (130)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (132)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (133)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (135)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (136)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (137)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5579  
 Thr Ser Gly Ile Gly Thr Ser Pro Ser Leu Arg Ser Leu Gln Ser Leu  
 1 5 10 15  
 Leu Gly Pro Ser Ser Lys Phe Arg His Ala Gln Gly Thr Val Leu His  
 20 25 30  
 Arg Asp Ser His Ile Thr Asn Leu Lys Gly Leu Asn Leu Thr Thr Pro  
 35 40 45  
 Gly Glu Ser Asp Gly Phe Cys Ala Asn Lys Leu Arg Val Ala Val Pro  
 50 55 60  
 Leu Leu Ser Ser Xaa Xaa Gln Val Ala Val Leu Glu Leu Arg Lys Pro  
 65 70 75 80  
 Gly Arg Leu Pro Asp Thr Ala Leu Pro Thr Leu Gln Asn Gly Ala Ala  
 85 90 95  
 Val Thr Asp Leu Ala Trp Asp Pro Phe Asp Pro His Arg Leu Ala Val  
 100 105 110

## 4921

Ala Gly Glu Asp Ala Xaa Ile Arg Leu Trp Xaa Val Pro Ala Xaa Gly  
 115 120 125

Xaa Xaa Arg Xaa Xaa His Xaa Xaa Xaa Asn Cys Ala Tyr Lys Ala  
 130 135 140

<210> 5580

<211> 67

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5580

Ser Asn Ser Leu Gln Val Trp Gly Trp Gln Ile Leu Ala Pro Leu Lys  
 1 5 10 15

Trp Ile Pro His Ala His Ala Ser Leu Phe Phe Ser Val Ala Arg Gly  
 20 25 30

Xaa Met Asp Lys Pro Lys Leu Gln Leu Lys Thr Xaa His Arg Pro Gly  
 35 40 45

Thr Val Thr His Ala Phe Asn Ile Ser Thr Leu Gly Xaa Gln Gly Gly  
 50 55 60

Arg Ile Thr  
 65

<210> 5581

<211> 66

<212> PRT

<213> Homo sapiens

## 4922

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (18)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5581

Gly	Leu	Pro	Lys	Ala	Gln	Gln	Glu	Gln	Leu	Leu	Leu	Ile	Leu	Gln	Xaa
1				5					10					15	

Pro	Xaa	Pro	Arg	Pro	Ala	Phe	His	Pro	Lys	Pro	His	Leu	Val	Ser	Met
			20					25					30		

Ser	Ile	Ser	Thr	Val	Trp	Pro	Ser	Cys	Asp	Cys	Ser	Leu	Ala	Ala	Thr
		35					40					45			

Pro	Ser	Val	Ile	Pro	His	Ser	Glu	Ser	Ser	Phe	Ser	Gly	Ser	Leu	Ala
	50					55					60				

Phe	Ser
65	

&lt;210&gt; 5582

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (33)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5582

Ser	Leu	Ile	Ser	Asp	Ala	Leu	Arg	Phe	Leu	Arg	Ser	Glu	Met	Ile	Lys
1					5				10					15	

Leu	Tyr	Ser	Leu	Val	Tyr	Trp	Tyr	Phe	Phe	Thr	Ser	Ser	Glu	Ile	Gly
			20					25					30		

Xaa	Met	Leu	Tyr	Val	Arg	Arg	Ala	Phe	Phe	Lys	Leu	Cys	Cys	Phe	Glu
		35					40					45			

His	Val	Tyr	Leu	Phe
50				



4923

&lt;210&gt; 5583

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5583

Gln Gly Lys Lys Ser Ala Val Cys Leu Val Phe Ile Phe Val Phe Thr  
1 5 10 15

Gln Val Gly Leu Leu Phe Glu Thr Phe Phe Leu Asn Lys Arg Ser Tyr  
20 25 30

Lys Val Phe Thr Phe Ser Pro Ser Lys Asn Pro Ile Phe Leu Glu Phe  
35 40 45

Gly Leu Ser Ile Ile Ser Gly Ile Lys Glu  
50 55

&lt;210&gt; 5584

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5584

Thr Thr Val Asn Ile His Val Gly Gly Gly Gly Arg Leu Arg Pro Ala  
1 5 10 15

Lys Ala Gln Val Arg Leu Asn His Pro Ala Leu Leu Ala Ser Thr Gln  
20 25 30

Glu Ser Met Gly Leu His Arg Ala Gln Gly Leu Leu Met Pro Pro Ser  
35 40 45

Thr Cys Glu Pro Gly His Glu Ala Ser Leu Lys Gln Gly Phe Gln Pro  
50 55 60

Asp Ala Ile Asp Pro Gln Asn Leu Thr Trp Lys Ser Arg His  
65 70 75

&lt;210&gt; 5585

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

4924

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (26)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5585

Ile	Ser	Lys	Gln	Leu	Tyr	Phe	Phe	Ile	Gln	Ala	Cys	His	Cys	Glu	Pro
1				5				10						15	

Val	Leu	Ile	Val	Ser	Glu	Leu	Phe	Val	Xaa	Pro	Glu	Phe	Cys	Leu	Leu
			20					25					30		

Ile	Ser	Phe	Gln	Leu	His	Ser	Xaa	Ser	Phe	Phe	Asn	Cys	Val	Gly	Gly
		35					40					45			

Lys	Asn	Asn	Gly	Arg	Asn
			50		

&lt;210&gt; 5586

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5586

Leu	Tyr	Ser	Phe	Ser	Ser	Leu	Leu	Pro	Leu	Ser	Pro	Arg	Trp	Lys	Lys
1				5				10						15	

Arg	Thr	Asn	Val	Glu	Thr	Pro	Glu	Gly	Val	Gln	Leu	Asp	Gln	Gly	Asp
			20					25						30	

Ile	Arg	His	Leu	Thr	Val	Phe	Ser	Val	Cys	Pro	Ser	Leu	Tyr	Ser	Asn
		35					40					45			

Val	Arg	Asn	Gly	Ser	Val	Phe	Phe	Phe	Thr	Phe	Ile	Gly	Ser	Ser	Tyr
	50					55					60				

Phe	Ser	Thr	Leu	Phe	Leu	Met	Cys	Ser	Phe	Phe	Asn	Trp	Leu	Val	Phe
65					70					75					80

Pro	Tyr	Tyr	Leu	Gln	Leu	Tyr	Gly	Leu
					85			

## 4925

&lt;210&gt; 5587

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (18)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5587

Gln	Lys	Asn	Pro	Leu	Met	Val	Cys	Phe	Leu	Tyr	Trp	Ala	Thr	Gln	Trp
1				5					10					15	

Cys	Xaa	Lys	Val	Tyr	Met	Lys	Pro	Gln	Cys	Lys	Gln	Gly	Leu	Ser	Ser
			20					25					30		

Gln	Asp	Ile	Asn	Phe	Asp	Arg	Lys	Xaa	Cys	Val	Phe	Met	Cys	Val	Cys
		35					40					45			

Val	Ser	Gly	Cys	Asn
				50

&lt;210&gt; 5588

&lt;211&gt; 46

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5588

Phe	Cys	Lys	Tyr	Asn	Asn	Asn	Ser	Asn	Asn	Thr	Ile	Leu	Ser	Phe	Lys
1				5					10					15	

Lys	Leu	Pro	Ile	His	Phe	Ser	Asn	Leu	Thr	Val	Ser	Gly	Gly	Val	Tyr
			20					25					30		

Val	Cys	Leu	Cys	Phe	His	Leu	Cys	Asn	Gly	Cys	Leu	Ile	Ile
		35					40					45	

&lt;210&gt; 5589

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

4926

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (32)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (53)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5589

Cys	Leu	Thr	Met	Ala	Ser	Glu	His	Val	Lys	Cys	Thr	Tyr	Ile	Leu	Gln
1				5					10					15	

Pro	Lys	Thr	Val	Cys	Ile	Lys	Leu	Gln	Pro	Ser	Ile	Ile	Lys	Phe	Xaa
			20					25						30	

Val	Gln	Phe	Gln	Asp	Gly	Asn	Gln	Gly	Phe	Phe	Phe	Arg	Asp	Val	Lys
		35					40					45			

Lys	Ser	Pro	Ser	Xaa	Ile	Ile	Leu	Asn	Leu
	50						55		

&lt;210&gt; 5590

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (63)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (74)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5590

Gln	Leu	Asn	Phe	Met	Asn	Met	Phe	Val	Lys	Leu	Leu	Phe	Tyr	Ile	Ser
1				5					10					15	

Cys	Gln	Ile	Glu	Lys	Phe	Ile	Ser	Ser	Leu	Leu	Tyr	Leu	Trp	Lys	Tyr
			20						25					30	

Lys	Pro	Phe	Tyr	Arg	Lys	Lys	Ser	Ser	Lys	Thr	Ile	Lys	Trp	Ile	Ser
			35						40				45		

## 4927

Ala Cys Phe Val Ser His Cys Leu Gln Ile Leu Trp Leu Ser Xaa Gly  
 50 55 60

His Arg Ala Leu Val Gly Cys Thr Gly Xaa Pro Ile Phe Pro  
 65 70 75

<210> 5591

<211> 42

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5591

Xaa Thr Leu Thr Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val Xaa  
 1 5 10 15

Thr Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg  
 20 25 30

Gly Thr Ala Lys Val Tyr Gly Met Val Cys  
 35 40

<210> 5592

<211> 502

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (128)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5592

Pro Val Ala Ala Val Ser Gly Arg Ala Val Gly Gly Ser Arg Gly Gly  
 1 5 10 15

Gly Arg Gly Gly Met Ala Ala Ala Ala Gly Ala Gly Ser Gly Pro  
 20 25 30

4928

Trp Ala Ala Gln Glu Lys Gln Phe Pro Pro Ala Leu Leu Ser Phe Phe  
 35 40 45  
 Ile Tyr Asn Pro Arg Phe Gly Pro Arg Glu Gly Gln Glu Glu Asn Lys  
 50 55 60  
 Ile Leu Phe Tyr His Pro Asn Glu Val Glu Lys Asn Glu Lys Ile Arg  
 65 70 75 80  
 Asn Val Gly Leu Cys Glu Ala Ile Val Gln Phe Thr Arg Thr Phe Ser  
 85 90 95  
 Pro Ser Lys Pro Ala Lys Ser Leu His Thr Gln Lys Asn Arg Gln Phe  
 100 105 110  
 Phe Asn Glu Pro Glu Glu Asn Phe Trp Met Val Met Val Val Arg Xaa  
 115 120 125  
 Pro Ile Ile Glu Lys Gln Ser Lys Asp Gly Lys Pro Val Ile Glu Tyr  
 130 135 140  
 Gln Glu Glu Glu Leu Leu Asp Lys Val Tyr Ser Ser Val Leu Arg Gln  
 145 150 155 160  
 Cys Tyr Ser Met Tyr Lys Leu Phe Asn Gly Thr Phe Leu Lys Ala Met  
 165 170 175  
 Glu Asp Gly Gly Val Lys Leu Leu Lys Glu Arg Leu Glu Lys Phe Phe  
 180 185 190  
 His Arg Tyr Leu Gln Thr Leu His Leu Gln Ser Cys Asp Leu Leu Asp  
 195 200 205  
 Ile Phe Gly Gly Ile Ser Phe Phe Pro Leu Asp Lys Met Thr Tyr Leu  
 210 215 220  
 Lys Ile Gln Ser Phe Ile Asn Arg Met Glu Glu Ser Leu Asn Ile Val  
 225 230 235 240  
 Lys Tyr Thr Ala Phe Leu Tyr Asn Asp Gln Leu Ile Trp Ser Gly Leu  
 245 250 255  
 Glu Gln Asp Asp Met Arg Ile Leu Tyr Lys Tyr Leu Thr Thr Ser Leu  
 260 265 270  
 Phe Pro Arg His Ile Glu Pro Glu Leu Ala Gly Arg Asp Ser Pro Ile  
 275 280 285  
 Arg Ala Glu Met Pro Gly Asn Leu Gln His Tyr Gly Arg Phe Leu Thr  
 290 295 300

## 4929

Gly	Pro	Leu	Asn	Leu	Asn	Asp	Pro	Asp	Ala	Lys	Cys	Arg	Phe	Pro	Lys	305	310	315	320
Ile	Phe	Val	Asn	Thr	Asp	Asp	Thr	Tyr	Glu	Glu	Leu	His	Leu	Ile	Val	325	330	335	
Tyr	Lys	Ala	Met	Ser	Ala	Ala	Val	Cys	Phe	Met	Ile	Asp	Ala	Ser	Val	340	345	350	
His	Pro	Thr	Leu	Asp	Phe	Cys	Arg	Arg	Leu	Asp	Ser	Ile	Val	Gly	Pro	355	360	365	
Gln	Leu	Thr	Val	Leu	Ala	Ser	Asp	Ile	Cys	Glu	Gln	Phe	Asn	Ile	Asn	370	375	380	
Lys	Arg	Met	Ser	Gly	Ser	Glu	Lys	Glu	Pro	Gln	Phe	Lys	Phe	Ile	Tyr	385	390	395	400
Phe	Asn	His	Met	Asn	Leu	Ala	Glu	Lys	Ser	Thr	Val	His	Met	Arg	Lys	405	410	415	
Thr	Pro	Ser	Val	Ser	Leu	Thr	Ser	Val	His	Pro	Asp	Leu	Met	Lys	Ile	420	425	430	
Leu	Gly	Asp	Ile	Asn	Ser	Asp	Phe	Thr	Arg	Val	Asp	Glu	Asp	Glu	Glu	435	440	445	
Ile	Ile	Val	Lys	Ala	Met	Ser	Asp	Tyr	Trp	Val	Val	Gly	Lys	Lys	Ser	450	455	460	
Asp	Arg	Arg	Glu	Leu	Tyr	Val	Ile	Leu	Asn	Gln	Lys	Asn	Ala	Asn	Leu	465	470	475	480
Ile	Glu	Val	Asn	Glu	Glu	Val	Lys	Lys	Leu	Cys	Ala	Thr	Gln	Phe	Asn	485	490	495	
Asn	Ile	Phe	Phe	Leu	Asp	500													

&lt;210&gt; 5593

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (57)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

## 4930

&lt;400&gt; 5593

Asn Pro Gly Ile Leu Ser Pro Ser Asn Leu Lys Val Phe Lys Leu Ile  
 1 5 10 15

Leu Phe Tyr Val Phe Leu Ala Val Tyr Val Leu Leu Lys Ser Leu Ser  
 20 25 30

Phe Cys Val Lys Ile Cys Leu Ser Leu Leu His Phe Thr Ala Ser Lys  
 35 40 45

Ile Lys Asn Thr Tyr Ile Leu Leu Xaa Ile Asp Ala Ser Lys  
 50 55 60

&lt;210&gt; 5594

&lt;211&gt; 453

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (327)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5594

Ser Ile Phe Arg Val Ser Pro Gly Phe Arg Ile Ala Met Ile Ile Pro  
 1 5 10 15

Ser Leu Glu Glu Leu Asp Ser Leu Lys Tyr Ser Asp Leu Gln Asn Leu  
 20 25 30

Ala Lys Ser Leu Gly Leu Arg Ala Asn Leu Arg Ala Thr Lys Leu Leu  
 35 40 45

Lys Ala Leu Lys Gly Tyr Ile Lys His Glu Ala Arg Lys Gly Asn Glu  
 50 55 60

Asn Gln Asp Glu Ser Gln Thr Ser Ala Ser Ser Cys Asp Glu Thr Glu  
 65 70 75 80

Ile Gln Ile Ser Asn Gln Glu Glu Ala Glu Arg Gln Pro Leu Gly His  
 85 90 95

Val Thr Lys Thr Arg Arg Arg Cys Lys Thr Val Arg Val Asp Pro Asp  
 100 105 110

Ser Gln Gln Asn His Ser Glu Ile Lys Ile Ser Asn Pro Thr Glu Phe  
 115 120 125



## 4931

Gln	Asn	His	Glu	Lys	Gln	Glu	Ser	Gln	Asp	Leu	Arg	Ala	Thr	Ala	Lys	
130					135					140						
Val	Pro	Ser	Pro	Pro	Asp	Glu	His	Gln	Glu	Ala	Glu	Asn	Ala	Val	Ser	
145					150					155					160	
Ser	Gly	Asn	Arg	Asp	Ser	Lys	Val	Pro	Ser	Glu	Gly	Lys	Lys	Ser	Leu	
				165					170					175		
Tyr	Thr	Asp	Glu	Ser	Ser	Lys	Pro	Gly	Lys	Asn	Lys	Arg	Thr	Ala	Ile	
			180					185					190			
Thr	Thr	Pro	Asn	Phe	Lys	Lys	Leu	His	Glu	Ala	His	Phe	Lys	Glu	Met	
		195					200					205				
Glu	Ser	Ile	Asp	Gln	Tyr	Ile	Glu	Arg	Lys	Lys	Lys	His	Phe	Glu	Glu	
210						215					220					
His	Asn	Ser	Met	Asn	Glu	Leu	Lys	Gln	Gln	Pro	Ile	Asn	Lys	Gly	Gly	
225					230					235					240	
Val	Arg	Thr	Pro	Val	Pro	Pro	Arg	Gly	Arg	Leu	Ser	Val	Ala	Ser	Thr	
				245					250					255		
Pro	Ile	Ser	Gln	Arg	Arg	Ser	Gln	Gly	Arg	Ser	Cys	Gly	Pro	Ala	Ser	
			260					265					270			
Gln	Ser	Thr	Leu	Gly	Leu	Lys	Gly	Ser	Leu	Lys	Arg	Ser	Ala	Ile	Ser	
		275					280					285				
Ala	Ala	Lys	Thr	Gly	Val	Arg	Phe	Ser	Ala	Ala	Thr	Lys	Asp	Asn	Glu	
290						295					300					
His	Lys	Arg	Ser	Leu	Thr	Lys	Thr	Pro	Ala	Arg	Lys	Ser	Ala	His	Val	
305					310					315					320	
Thr	Val	Ser	Gly	Gly	Thr	Xaa	Lys	Gly	Glu	Ala	Val	Leu	Gly	Thr	His	
			325						330					335		
Lys	Leu	Lys	Thr	Ile	Thr	Gly	Asn	Ser	Ala	Ala	Val	Ile	Thr	Pro	Phe	
			340					345					350			
Lys	Leu	Thr	Thr	Glu	Ala	Thr	Gln	Thr	Pro	Val	Ser	Asn	Lys	Lys	Pro	
		355					360					365				
Val	Phe	Asp	Leu	Lys	Ala	Ser	Leu	Ser	Arg	Pro	Leu	Asn	Tyr	Glu	Pro	
370						375					380					
His	Lys	Gly	Lys	Leu	Lys	Pro	Trp	Gly	Gln	Ser	Lys	Glu	Asn	Asn	Tyr	
385					390					395					400	

## 4932

Leu Asn Gln His Val Asn Arg Ile Asn Phe Tyr Lys Lys Thr Tyr Lys  
 405 410 415

Gln Pro His Leu Gln Thr Lys Glu Glu Gln Arg Lys Lys Arg Glu Gln  
 420 425 430

Glu Arg Lys Glu Lys Lys Ala Lys Val Leu Gly Met Arg Arg Gly Leu  
 435 440 445

Ile Leu Ala Glu Asp  
 450

<210> 5595

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5595

Leu Leu Lys Lys Lys Ser Gly Glu Glu Arg Tyr Leu Ser Asn Leu Leu  
 1 5 10 15

Asn Leu Tyr Lys Thr Leu His Cys Arg Gly Gly Ala Thr Pro Lys Tyr  
 20 25 30

Phe His Asp Leu His Gly Leu Ile Arg Phe Phe Phe Phe Tyr Thr Ile  
 35 40 45

Leu Ala Thr Phe Ser Met Glu Lys Arg Gln Phe Thr Gln Phe Pro Xaa  
 50 55 60

<210> 5596

<211> 307

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (147)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (300)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5596

His Thr Lys Lys Met Ser Met Leu Lys Pro Ser Gly Leu Lys Ala Pro  
1 5 10 15

Thr Lys Ile Leu Lys Pro Gly Ser Thr Ala Leu Lys Thr Pro Thr Ala  
20 25 30

Val Val Ala Pro Val Glu Lys Thr Ile Ser Ser Glu Lys Ala Ser Ser  
35 40 45

Thr Pro Ser Ser Glu Thr Gln Glu Glu Phe Val Asp Asp Phe Arg Val  
50 55 60

Gly Glu Arg Val Trp Val Asn Gly Asn Lys Pro Gly Phe Ile Gln Phe  
65 70 75 80

Leu Gly Glu Thr Gln Phe Ala Pro Gly Gln Trp Ala Gly Ile Val Leu  
85 90 95

Asp Glu Pro Ile Gly Lys Asn Asp Gly Ser Val Ala Gly Val Arg Tyr  
100 105 110

Phe Gln Cys Glu Pro Leu Lys Gly Ile Phe Thr Arg Pro Ser Lys Leu  
115 120 125

Thr Arg Lys Val Gln Ala Glu Asp Glu Ala Asn Gly Leu Gln Thr Thr  
130 135 140

Pro Ala Xaa Arg Ala Thr Ser Pro Leu Cys Thr Ser Thr Ala Ser Met  
145 150 155 160

Val	Ser	Ser	Ser	Pro	Ser	Thr	Pro	Ser	Asn	Ile	Pro	Gln	Lys	Pro	Ser
				165					170					175	

Gln Pro Ala Ala Lys Glu Pro Ser Ala Thr Pro Pro Ile Ser Asn Leu  
180 185 190

Thr Lys Thr Ala Ser Glu Ser Ile Ser Asn Leu Ser Glu Ala Gly Ser  
195 200 205

Ile Lys Lys Gly Glu Arg Glu Leu Lys Ile Gly Asp Arg Val Leu Val  
210 215 220

Gly Gly Thr Lys Ala Gly Val Val Arg Phe Leu Gly Glu Thr Asp Phe  
225 230 235 240

Ala Lys Gly Glu Trp Cys Gly Val Glu Leu Asp Glu Pro Leu Gly Lys  
245 250 255

Asn Asp Gly Ala Val Ala Gly Thr Arg Tyr Phe Gln Cys Gln Pro Lys  
260 265 270

Tyr Gly Leu Phe Ala Pro Val His Lys Val Thr Lys Ile Gly Phe Pro  
275 280 285

Ser Thr Thr Pro Ala Lys Ala Lys Ala Asn Ala Xaa Gly Glu Leu Trp  
290 295 300

Arg Pro Arg  
305

```
<210> 5597
<211> 118
<212> PRT
<213> Homo sapiens
```

<400> 5597  
Asn Gly Gly Gly Gln His Cys Cys Trp Arg Asn Arg Met Pro His Pro  
1 5 10 15

Trp Trp Val Leu His Thr Val Ser Gly Gly Gln Val Ser Cys Gln Pro  
20 25 30

Pro Pro Arg Asn Ser Pro Pro Ser Glu Ala Thr Lys Thr Ser Arg Val  
35 40 45

Ser Gln Ser Ala Ile Leu Arg Lys Val Leu Arg Gly Thr Asp Lys Val  
50 55 60

Arg Arg Glu Ser Cys Gly Leu Glu Ala Ala Arg Asn Lys Pro Ser Arg  
65 70 75 80

Arg Arg Gly Ile Pro Ala Gly Gly Met Gly Gly Ala Gly Ala Trp Glu  
85 90 95

Met	Arg	Thr	Gly	Leu	Val	Met	Val	Cys	Gly	Arg	Gln	Leu	Leu	Arg	Trp
			100					105					110		

Arg Ala Gly Gly Arg Gly  
115

<210> 5598

4935

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5598

Gln Tyr Phe Leu Lys Ile Ile Thr Tyr Ile Ile Val Thr Lys His Leu  
1 5 10 15

Cys Gln Ile Arg Thr Ser Ser Thr Glu Ala Ala Val  
20 25

&lt;210&gt; 5599

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5599

Lys Phe Trp Arg Leu Gly Xaa Leu Arg Ser Arg Ser Gln Gln Val Trp  
1 5 10 15

Cys Leu Ala Arg Ala His Ser Ser Leu Pro Ser Cys Cys Val Thr Ala  
20 25 30

Trp Trp Glu Gly Gln Ala Ser Ser His Gly Leu Phe Tyr Ser Gly Pro  
35 40 45

Xaa Ser Ile Gly Glu Gly Ser Ala Ile Ile Thr Ser Ser Pro Arg His  
50 55 60

Leu Gln Gly  
65

&lt;210&gt; 5600

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

4936

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5600

Xaa Ser Val His Thr Leu Tyr Arg Asn Ser Leu Tyr Ser Ile Pro Val  
1 5 10 15

Glu Gly His Phe Asn Pro His Ser Ile Pro Ser Val Leu Arg Thr Ser  
20 25 30

Ser Lys Ala Ala Cys Ser Ser Ser Ser Val Val Ala Thr Leu Asp Leu  
35 40 45

His Val  
50

&lt;210&gt; 5601

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5601

Gly Asp Cys Gly Lys Gly Thr Val Tyr Lys Ala Val Gly Met Tyr Arg  
1 5 10 15

Lys Ala Gln Gly Ile Gly Gln Gly Ala Gly Leu Phe Ile Val Ile Phe  
20 25 30

Thr Ser Gly Leu Ile Leu Gly Gly Gly Gly Val Leu Pro Gly Thr Arg  
35 40 45

Pro Tyr Gly  
50

&lt;210&gt; 5602

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (123)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

4937

&lt;221&gt; SITE

&lt;222&gt; (135)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5602

Lys Gln Phe Ala Ser Gly Asn Arg Thr Ala Gly Ala Val Phe Leu Gln  
 1 5 10 15

Gln Gln Thr Lys His Arg Gly Arg Thr Gln Ala Ser Thr Glu Gln Ala  
 20 25 30

Glu Thr Asp Asp Asn Met Asp Thr Lys Ser Ile Leu Glu Glu Leu Leu  
 35 40 45

Leu Lys Arg Ser Gln Leu Leu Glu Met Cys Tyr Asp Val Cys Glu Gly  
 50 55 60

Met Ala Phe Leu Glu Ser His Gln Phe Ile His Arg Asp Leu Ala Ala  
 65 70 75 80

Arg Asn Cys Leu Val Asp Arg Asp Leu Cys Val Lys Val Ser Asp Phe  
 85 90 95

Gly Met Thr Arg Tyr Val Leu Asp Asp Gln Tyr Val Ser Ser Val Gly  
 100 105 110

Thr Lys Phe Pro Val Lys Trp Ser Ala Pro Xaa Val Phe His Tyr Phe  
 115 120 125

Lys Tyr Ser Ser Lys Ser Xaa Arg Met Gly Ile Trp Asp Pro Asp  
 130 135 140

&lt;210&gt; 5603

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5603

Asn Phe Val Phe Leu Val Glu Lys Gly Phe Leu His Val Gly Gln Xaa  
 1 5 10 15

Gly Leu Glu Leu Pro Ile Ser Gly Asp Pro Pro Ala Ser Gln Ser Ala  
 20 25 30

## 4938

Gly Ile Thr Gly Val Ser Thr Thr Pro Arg Leu  
           35                                  40

<210> 5604

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5604

Val Gly Val Ser Ser Gln Leu Lys Lys Lys Xaa Asn Glu Ile Gly Ser  
       1                                  5                                  10                                  15

Arg Asn Glu Lys Gly Glu Arg Glu Arg Lys Lys Lys Met Asp Val Gly  
                                   20                                  25                                  30

Asn Phe Val Ala Cys Ser Leu Trp Ile Leu Gln Asn Tyr His Cys Gly  
                                   35                                  40                                  45

Tyr Cys Leu Thr Trp Leu Leu Leu Ala Met Lys Asn Gln Glu His Phe  
                                   50                                  55                                  60

His Tyr His Phe Leu Thr Ile His Gln Pro Gln Phe Leu Gly Ile Xaa  
                                   65                                  70                                  75                                  80

Leu Lys Phe

<210> 5605

<211> 429

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids



## 4939

&lt;400&gt; 5605

Val	Ser	Gln	Ala	Thr	Asp	Val	Glu	Val	Gly	Thr	Asp	Leu	Val	Pro	Ser
1				5					10					15	
Val	Thr	Val	Lys	Val	Thr	Leu	Gln	Asn	Arg	Val	Xaa	Leu	Gln	Lys	Ala
			20					25					30		
Lys	Leu	Ser	Val	Tyr	Val	Gln	Pro	Pro	Leu	Glu	Leu	Thr	Cys	Asp	Gln
		35					40					45			
Phe	Thr	Phe	Glu	Phe	Met	Asn	Arg	Asn	Pro	Asp	Gly	Ile	Pro	Arg	Val
	50					55					60				
Ile	Gln	Cys	Lys	Phe	Arg	Leu	Pro	Leu	Lys	Leu	Ile	Cys	Leu	Pro	Gly
65					70					75				80	
Gln	Pro	Ser	Lys	Thr	Ala	Ser	His	Lys	Ile	Thr	Ile	Asp	Thr	Asn	Lys
				85					90					95	
Ser	Pro	Val	Ser	Leu	Leu	Ser	Leu	Phe	Pro	Gly	Phe	Ala	Ser	Gln	Ser
			100					105					110		
Asp	Asp	Asp	Gln	Val	Asn	Val	Met	Gly	Phe	His	Phe	Leu	Gly	Gly	Ala
		115					120					125			
Arg	Ile	Thr	Val	Leu	Ala	Ser	Lys	Thr	Ser	Gln	Arg	Tyr	Arg	Ile	Gln
	130						135				140				
Ser	Glu	Gln	Phe	Glu	Asp	Leu	Trp	Leu	Ile	Thr	Asn	Glu	Leu	Ile	Leu
145					150					155				160	
Arg	Leu	Gln	Glu	Tyr	Phe	Glu	Lys	Gln	Gly	Val	Lys	Asp	Phe	Ala	Cys
				165					170					175	
Ser	Phe	Ser	Gly	Ser	Ile	Pro	Leu	Gln	Glu	Tyr	Phe	Glu	Leu	Ile	Asp
			180					185					190		
His	His	Phe	Glu	Leu	Arg	Ile	Asn	Gly	Glu	Lys	Leu	Glu	Glu	Leu	Leu
		195					200					205			
Ser	Glu	Arg	Ala	Val	Gln	Phe	Arg	Ala	Ile	Gln	Arg	Arg	Leu	Leu	Ala
	210					215					220				
Arg	Phe	Lys	Asp	Lys	Thr	Pro	Ala	Pro	Leu	Gln	His	Leu	Asp	Thr	Leu
225					230					235				240	
Leu	Asp	Gly	Thr	Tyr	Lys	Gln	Val	Ile	Ala	Leu	Ala	Asp	Ala	Val	Glu
				245					250					255	
Glu	Asn	Gln	Gly	Asn	Leu	Phe	Gln	Ser	Phe	Thr	Arg	Leu	Lys	Ser	Ala
			260					265					270		

## 4940

Thr His Leu Val Ile Leu Leu Ile Ala Leu Trp Gln Lys Leu Ser Ala  
 275 280 285

Asp Gln Val Ala Ile Leu Glu Ala Ala Phe Leu Pro Leu Gln Glu Asp  
 290 295 300

Thr Gln Glu Leu Gly Trp Glu Glu Thr Val Asp Ala Ala Ile Ser His  
 305 310 315 320

Leu Leu Lys Thr Cys Leu Ser Lys Ser Ser Lys Glu Gln Ala Leu Asn  
 325 330 335

Leu Asn Ser Gln Leu Asn Ile Pro Lys Asp Thr Ser Gln Leu Lys Lys  
 340 345 350

His Ile Thr Leu Leu Cys Asp Arg Leu Ser Lys Gly Gly Arg Leu Cys  
 355 360 365

Leu Ser Thr Asp Ala Ala Ala Pro Gln Thr Met Val Met Pro Gly Gly  
 370 375 380

Cys Thr Thr Ile Pro Glu Ser Asp Leu Glu Glu Arg Ser Val Glu Gln  
 385 390 395 400

Asp Ser Thr Glu Leu Phe Thr Asn His Arg His Leu Thr Ala Glu Thr  
 405 410 415

Pro Arg Pro Glu Val Ser Pro Leu Gln Gly Val Ser Glu  
 420 425

<210> 5606

<211> 59

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5606

Asn Ile Thr Thr Met Asn Pro Thr Ser His Cys Lys Asp Cys Val Leu  
 1 5 10 15

Tyr Phe Asp Leu Ser Ser Gly Ile Gly Asp Thr Leu Phe Gly His His  
 20 25 30

Glu Gly Thr Met Gln Asn Pro Ser Phe Xaa Asn Ser Phe Leu Ser Ser

## 4941

35

40

45

Ile Glu Asp Pro Lys Asn Gln Thr Phe Arg Val  
 50 55

&lt;210&gt; 5607

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (96)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5607

Lys Pro Gly His Thr Ala Gly Asp Glu Trp Lys Ala Ser Glu Thr Ser  
 1 5 10 15

Trp Val Phe Thr Ala Ile Pro Arg Arg Ser His Tyr His Leu Ser Cys  
 20 25 30

Val Ser Cys Glu Ile Ser Ser Ser Ile Arg Phe Ser Arg Ser Thr Asn  
 35 40 45

Pro Phe Gly Thr Val Cys Glu Gly Ser Lys Leu Arg Ile Ser Tyr Glu  
 50 55 60

Asn Leu Ile Pro Asp Asp Leu Leu Leu Ser Pro Thr Thr Pro Arg Trp  
 65 70 75 80

Asp His Leu Val Ala Gly Lys Gln Ala Gln Ala Pro Thr Asp Ser Xaa  
 85 90 95

Leu

&lt;210&gt; 5608

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5608

Gln Arg Lys Arg Glu Glu Gly Arg Leu Asp Thr Glu Arg Cys Leu  
 1 5 10 15

Ala Arg Gly Ser Gln Ser Gly Val Gln Pro Leu Gly Gly Pro Thr Pro

4942

	20		25		30
Gly	Glu	Asp	His	Leu	Pro
	35		40		45
Thr	Ser	Ser	Ile	Pro	Thr
Leu	Pro	Ala	Pro		
His	Pro	Ser	Cys		
	50				

<210> 5609  
 <211> 49  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (2)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (9)  
 <223> Xaa equals any of the naturally occurring L-amino acids

Ala	Xaa	Thr	Asn	Phe	Thr	Gln	Glu	Xaa	Ala	Met	Thr	Met	Ile	Thr
1			5					10					15	
Ser	Ser	Asn	Thr	Thr	His	Tyr	Arg	Glu	Ser	Trp	Tyr	Ala	Cys	Arg
			20				25						30	
Arg	Ser	Gly	Ile	Pro	Gly	Ser	Thr	His	Ala	Ser	Gly	Arg	Gln	Arg
		35				40						45		

Gln

<210> 5610  
 <211> 42  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (21)  
 <223> Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

4943

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (31)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5610

Leu	Ala	Lys	Glu	Val	Lys	Pro	Arg	Gly	Phe	Pro	Gly	Gly	Lys	Ile	Phe
1				5				10					15		

Pro	Pro	Gly	Gly	Xaa	Xaa	Gly	Asn	Pro	Pro	Thr	Gly	Pro	Val	Xaa	Pro
			20				25						30		

Gly	Val	Pro	Lys	Phe	Lys	Thr	Pro	Lys	Phe
			35				40		

&lt;210&gt; 5611

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (55)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (63)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (80)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5611

His	Ala	Gln	Gly	Glu	Ala	Arg	Val	Gln	Pro	Leu	Arg	Gly	Leu	Leu	Gln
1				5				10					15		

Glu	Arg	Gly	Gly	Gln	Gln	Pro	Trp	Gly	Arg	Gly	Arg	Pro	Arg	Gly	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

20                      25                      30

Pro Cys Ser Cys Ala  
85

Met	Ser	Ser	Tyr	Ile	Pro	Cys	Lys	Ile	Trp	Val	Val	Ser	Tyr	Thr	Ala
65					70					75					80

4945

Gly Leu His Leu Thr Leu Glu Gly Lys Lys Xaa  
                     85                    90

&lt;210&gt; 5613

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (15)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (34)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (50)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (61)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5613

Asn Ser Glu Lys Glu Gln Trp Leu Cys Ser Phe Leu Ala Asn Xaa Leu  
   1                    5                    10                    15

Gln Lys Glu Ser Thr Trp Thr Ser Val Pro Gly Val Glu Ile Leu Arg  
                     20                    25                    30

Gly Xaa Glu Leu Val Gly Glu His Phe Pro Thr Trp Leu Arg Gln Gly  
                     35                    40                    45

Phe Xaa Trp Gly Arg Gly Arg Xaa Tyr Ser Gly Gly Xaa Ser Pro Pro  
                     50                    55                    60

Arg Arg His His Thr Phe Pro Pro Gly Val Pro Gln Gly Pro Arg  
   65                    70                    75

4946

<210> 5614  
 <211> 219  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (215)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5614

Leu Ser Phe Phe Ser Leu Thr Ala Ser Tyr Ser Pro Ile Gln Pro His  
 1 5 10 15

Ser Leu Ile Lys His Gln Gln Ile Pro Leu His Ser Pro Pro Ser Lys  
 20 25 30

Val Ser His His Gln Leu Ile Leu Gln Gln Gln Gln Gln Ile Gln  
 35 40 45

Pro Ile Thr Leu Gln Asn Ser Thr Gln Asp Pro Pro Pro Ser Gln His  
 50 55 60

Cys Ile Pro Leu Gln Asn His Gly Leu Pro Pro Ala Pro Ser Asn Ala  
 65 70 75 80

Gln Ser Gln His Cys Ser Pro Ile Gln Ser His Pro Ser Pro Leu Thr  
 85 90 95

Val Ser Pro Asn Gln Ser Gln Ser Ala Gln Gln Ser Val Val Val Ser  
 100 105 110

Pro Pro Pro Pro His Ser Pro Ser Gln Ser Pro Thr Ile Ile Ile His  
 115 120 125

Pro Gln Ala Leu Ile Gln Pro His Pro Leu Val Ser Ser Ala Leu Gln  
 130 135 140

Pro Gly Pro Asn Leu Gln Gln Ser Thr Ala Asn Gln Val Gln Ala Thr  
 145 150 155 160

Ala Gln Leu Asn Leu Pro Ser His Leu Pro Leu Pro Ala Ser Pro Val  
 165 170 175

Val His Ile Gly Pro Val Gln Gln Ser Ala Leu Val Ser Pro Gly Gln  
 180 185 190

Gln Ile Val Ser Pro Ser His Gln Gln Tyr Ser Ser Leu Gln Ser Ser



4947

195                      200                      205  
 Pro Ile Pro Ile Ala Ser Xaa Pro Gln Met Ser  
 210                      215  
  
 <210> 5615  
 <211> 26  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (6)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (26)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 5615  
 Pro Ser Arg Leu Leu Xaa Pro Leu Ile Arg Val Ser Ile Lys Leu Lys  
 1                      5                      10                      15  
  
 Leu Arg Pro Asp Arg Arg Thr Ala Ser Xaa  
 20                      25  
  
  
 <210> 5616  
 <211> 99  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 5616  
 Tyr Arg Ala Thr Phe Leu Asn Val Ser Asp Val Val Arg Pro Ser His  
 1                      5                      10                      15  
  
 Thr Ser Ala Val Ser Phe Ser Ala Ser Leu Gly Leu Ala Phe Cys Ser  
 20                      25                      30  
  
 Ser Val Pro His Thr Met Ile Pro Leu Gly Gln Ala Phe Ala Cys Ala  
 35                      40                      45  
  
 Val Ser Pro Val Lys Leu Thr Ser Leu Pro Leu Trp Ala Gln Ile Pro  
 50                      55                      60  
  
 Ala Gln Val Ala Gly Val Arg Ser Ser Arg Gly Gly Glu Ser Ser Trp  
 65                      70                      75                      80

4948

Arg Ala Gly Ser Ile Val Arg Arg Lys Gly His Gly Gln Asn Pro Gly  
85 90 95

Glu His Arg

<210> 5617

<211> 67

<212> PRT

<213> Homo sapiens

<400> 5617

Gln Val Leu Cys Lys Cys Leu Pro Ser Leu Gln Val Pro Ala Thr Cys  
1 5 10 15

Pro Lys Lys Arg His Ile Lys Lys Leu Ser Asp Thr Ser Pro Asp Phe  
20 25 30

Ile Tyr Phe Ile Tyr Leu Thr Thr Tyr Met Leu Val Cys Arg Asn Tyr  
35 40 45

Ile Leu Asp Leu Phe Pro Tyr Leu Leu Arg Thr Val Leu Leu Leu Lys  
50 55 60

Ala Ala Thr  
65

<210> 5618

<211> 81

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5618

Ser Cys Gln Val Ser Pro Ala Gly Arg Lys His Cys Xaa Pro Ser Ala  
1 5 10 15

## 4949

Gly Ser Ser Leu Glu Ser Gln Xaa Gly Lys Arg Ser Trp Pro Leu Pro  
                   20                  25                  30

Pro Ala Asp Arg Ser Ser Ala Ser Met Arg Phe Val Val Val Thr Phe  
           35                  40                  45

Ser Val Thr Ile Lys Gly Asp Phe Phe Leu Asn Ile Lys Leu Phe Phe  
       50                  55                  60

Glu Gln Gly Met Asn Met Ser Phe Cys Asn Val Thr Glu Val Glu Phe  
       65                  70                  75                  80

Lys

<210> 5619

<211> 48

<212> PRT

<213> Homo sapiens

<400> 5619

Ala Leu Leu Val His Glu Asp Lys Leu Pro Glu Gly Phe Gly Cys Met  
   1                  5                  10                  15

Leu His Ser Val Thr Ser Ser Tyr Leu Lys Ile Ser Val Leu Tyr Leu  
           20                  25                  30

Ala Leu Tyr Leu Lys Val Asn Thr Asn Leu Thr Tyr Leu Lys Ile Phe  
       35                  40                  45

<210> 5620

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5620

Cys Leu Ser Pro Gly Thr Trp Ala Asp Leu Val Pro Gly Glu Leu Ser  
   1                  5                  10                  15

Pro Leu Leu Ala Lys Glu Leu Leu Ser Ser Gln Thr Leu Leu Leu Arg  
           20                  25                  30

Cys Pro Pro Cys Met Val Phe Glu Val Phe Glu Val Phe Leu Glu Phe  
       35                  40                  45

## 4950

Thr Cys Trp Arg Leu Gln Leu Thr Glu Arg Pro Gly Leu Asp Cys Ala  
 50 55 60

Ser Cys Ser Ser Arg Thr Lys Asp Ile Ser Trp Lys Cys Met Arg Pro  
 65 70 75 80

Arg Ile Cys Asp Arg Asn Gly Ser Ser His Val Arg Tyr Ala Pro Trp  
 85 90 95

Lys Asp Leu Glu Ile Arg Asn Leu Ser Glu His  
 100 105

<210> 5621  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

<400> 5621  
 Phe Tyr Val Arg Tyr Tyr Arg Tyr Phe Glu Met Val Thr Asp Ser Phe  
 1 5 10 15

Glu Ile Leu Ser Ser Leu Glu Cys Asp Ala Phe Asn Ile Ala Ser Gly  
 20 25 30

Phe Arg Trp Arg Asn Thr Met Leu Leu Ser Leu Lys Ile Asn Ser Ile  
 35 40 45

Ser Pro Ile Val  
 50

<210> 5622  
 <211> 44  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (38)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5622  
 Ser Ser Cys Met Asn Gln Gly Ser His Ser Gly Phe Gln Gly Leu Asp  
 1 5 10 15

Phe Leu Val Cys Lys Arg Asp Phe Thr Met His Leu Ala Thr Ser Pro  
 20 25 30

4951

Ser Ser Leu Gly Asn Xaa Lys Thr Lys Cys Arg Gln  
           35                          40

&lt;210&gt; 5623

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (62)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5623

Gln Gly Asn Pro Lys Leu Gln Lys Leu Lys Gly Gly Glu Glu Gly Pro  
   1                  5                  10                  15

Val Leu Met Ala Glu Ala Val Lys Lys Val Asn Arg Gly Asn Gly Lys  
                   20                  25                  30

Thr Ser Ser Arg Ile Leu Leu Leu Thr Lys Gly His Val Ile Leu Thr  
           35                          40                  45

Asp Thr Lys Lys Ser Gln Ala Lys Ile Val Ile Gly Leu Xaa Asn Val  
       50                  55                  60

Ala Gly Val Ser Val Thr Ser Leu Lys Asp Gly Leu Phe Ser Leu His  
   65                  70                  75                  80

Leu Ser Xaa Met Ser Ser Val Gly Ser Lys Gly Asp Phe Leu Leu Val  
                   85                  90                  95

Lys Arg Ala Cys Asp  
           100

&lt;210&gt; 5624

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5624

## 4952

Asn Arg Ser Val Gln Ser Tyr Phe Phe Leu Thr Leu Asn Phe Pro Ser  
 1 5 10 15  
 Arg Glu Tyr Thr Ile Trp Leu Arg Gly Arg Gly Ser Pro Glu Glu Arg  
 20 25 30  
 Gly Phe Ala Leu Arg Gly Arg Ala Ser Leu Asp Phe Ala Ala Ser Asn  
 35 40 45  
 Phe Ser Arg Gly Val Glu Gly Gly Ala Leu Gly Gly Pro His Ser Leu  
 50 55 60  
 Ser Gly Val Pro Ala Arg Val Ser Phe  
 65 70

&lt;210&gt; 5625

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (59)

&lt;223&gt; xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5625

Ser Cys Glu Asp Gly Lys Val Glu Gln Glu Ala Leu Ser Ala Phe Leu  
 1 5 10 15  
 His Asp Val Asn Glu Glu Ile Gln Cys Gln Ile Glu Val Asp Gly Thr  
 20 25 30  
 Pro Arg Gly Arg Gly Ala Gly Val Gly Ser Asp Val Pro Ser Pro Pro  
 35 40 45  
 Ser Pro Gly Pro Thr Asp Cys Gly His Glu Xaa Ala Gly Trp Cys Tyr  
 50 55 60  
 Asp Ser Arg Leu Gln His Arg Ala Leu Pro Ser Ser Pro Gln Trp Asp  
 65 70 75 80  
 Ile Lys Thr Thr Leu Gly Pro Phe Val Gln Gly Thr Thr Ser Ser Ile  
 85 90 95  
 Asp Gly Glu Asn Lys Leu Ser Arg Ala Thr Thr Gly Trp Arg Glu Ala  
 100 105 110  
 Gly Thr Ile Val Phe Leu Arg Ser Val Thr Ala Asp Pro Thr Asp His  
 115 120 125

## 4953

Ala Cys Trp Tyr Thr Leu Val Pro Asp Pro Ala Cys Arg Thr Ser Ala  
 130 135 140

Val Cys  
 145

<210> 5626  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<400> 5626  
 Gly Gly Asn Ser Gly Asn Gly Pro Ala Lys Ile Tyr Gly Ala Ala Ala  
 1 5 10 15

Ala Asp Asp Thr Ala Asn Ile Thr Gln Gln Pro Asp Ala Asn Val Asp  
 20 25 30

Ile Asp Trp Gln Gly Gln Ala Phe Arg Gly Asn Asn Gln Gln Val Leu  
 35 40 45

Leu Glu Gln Leu Glu Asn Gln Gly Ile Arg Ile  
 50 55

<210> 5627  
 <211> 48  
 <212> PRT  
 <213> Homo sapiens

<400> 5627  
 Lys Ala Lys Gln Cys Lys Asn Pro Leu Gln Lys Ala Arg Leu Pro Pro  
 1 5 10 15

Ser Thr Glu Pro Gln Leu Leu Cys Ser Pro Leu Gln Arg Gln Trp Leu  
 20 25 30

Leu Leu Val Thr Cys Ile Ser Cys Trp Ile Cys Val Phe Tyr Gln Gly  
 35 40 45

<210> 5628  
 <211> 39

4954

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5628

Asp Ser Val Leu Ser Leu Ile Ser His Asn Gln Leu Phe Leu Leu Val  
1 5 10 15

Pro Asn Ser Cys Ser Pro Gly Asp Pro Leu Val Leu Glu Arg Pro Pro  
20 25 30

Pro Arg Trp Ser Ser Ser Phe  
35

&lt;210&gt; 5629

&lt;211&gt; 26

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5629

Trp His Met Pro Val Ile Pro Ala Leu Trp Glu Ser Glu Ala Gly Gly  
1 5 10 15

Ser Leu Glu Ser Arg Ser Leu Arg Leu Pro  
20 25

&lt;210&gt; 5630

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5630

Ile Ala Asn Ser Lys Gly Cys Thr Ser Val Ile Ile Asn Lys Asn Leu  
1 5 10 15

Ala Asn Ser Cys Gly Thr Gly Tyr Ser His Leu Ile Cys Leu Val Pro  
20 25 30

Lys Ile Ala Cys Pro Phe Pro Asn Ser Ser Gln Leu Asp Cys Ala Thr  
35 40 45

Lys Thr Asp Lys Tyr Leu Leu Gly Asn His Asn His Gly Asp Leu Leu  
50 55 60

Pro Gln Leu Gly Pro Trp Tyr Ile Phe Val Cys Ile Leu Trp Cys Tyr  
65 70 75 80

Met Gln Ile Asn Thr Phe Asn



## 4955

85

&lt;210&gt; 5631

&lt;211&gt; 93

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (87)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5631

Gln	Glu	Thr	Ser	Lys	Met	Glu	Thr	Leu	Ser	Phe	Pro	Arg	Tyr	Asn	Val
1				5					10					15	

Ala	Glu	Ile	Val	Ile	His	Ile	Arg	Asn	Lys	Ile	Leu	Thr	Gly	Ala	Asp
			20					25					30		

Gly	Lys	Asn	Leu	Thr	Lys	Asn	Asp	Leu	Tyr	Pro	Asn	Pro	Lys	Pro	Glu
		35					40					45			

Val	Leu	His	Met	Ile	Tyr	Met	Arg	Ala	Leu	Gln	Ile	Val	Tyr	Gly	Ile
	50					55					60				

Arg	Leu	Glu	His	Phe	Tyr	Met	Met	Pro	Val	Asn	Ser	Glu	Val	Met	Tyr
65					70					75				80	

Pro	His	Leu	Met	Gly	Arg	Xaa	Leu	Thr	Ile	Gln	Ala	Ile
				85					90			

&lt;210&gt; 5632

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (97)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (98)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

## 4956

&lt;221&gt; SITE

&lt;222&gt; (99)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (102)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (104)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (111)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5632

Thr	Val	Leu	Gly	His	Val	Leu	Tyr	Leu	Cys	Leu	Ala	Pro	His	Leu	Phe
1				5				10						15	

Leu	Asp	Pro	Leu	Val	Ile	Cys	Met	Thr	Thr	Phe	Lys	Asn	Phe	Asn	Phe
			20					25					30		

Val	Cys	Cys	Leu	Arg	His	Cys	Cys	Glu	His	Pro	His	Gly	Val	Arg	His
		35					40					45			

Pro	Pro	Thr	Leu	Ala	Pro	Ala	Ser	Thr	Leu	Leu	His	Leu	Thr	Ser	Val
	50					55					60				

Tyr	Pro	Ala	Ala	Leu	Leu	Leu	Leu	Leu	Val	Cys	Val	Asn	Glu	Asp	Asn
65					70					75					80

Leu	Val	Ala	Val	Thr	Tyr	Lys	Cys	Phe	Ile	Trp	His	His	Pro	Ser	Val
				85					90					95	

Xaa	Xaa	Xaa	Trp	Trp	Xaa	Glu	Xaa	Thr	Leu	Ala	Pro	Thr	Pro	Xaa	His
			100					105					110		

Thr Ser

&lt;210&gt; 5633

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

## 4957

<220>  
 <221> SITE  
 <222> (145)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (159)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (165)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (179)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (182)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (183)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (187)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (190)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5633  
 Lys Glu Asn Lys Val Val Leu Ile Val Gly Glu Thr Gly Ser Gly Lys  
 1 5 10 15  
 Thr Thr Gln Ile Pro Gln Phe Leu Leu Asp Asp Cys Phe Lys Asn Gly  
 20 25 30  
 Ile Pro Cys Arg Ile Phe Cys Thr Gln Pro Arg Arg Leu Ala Ala Ile  
 35 40 45  
 Ala Val Ala Glu Arg Val Ala Ala Glu Arg Arg Glu Arg Ile Gly Gln

4958

50		55		60											
Thr	Ile	Gly	Tyr	Gln	Ile	Arg	Leu	Glu	Ser	Arg	Val	Ser	Pro	Lys	Thr
65					70					75					80
Leu	Leu	Thr	Phe	Cys	Thr	Asn	Gly	Val	Leu	Leu	Arg	Thr	Leu	Met	Ala
				85					90					95	
Gly	Asp	Ser	Thr	Leu	Ser	Thr	Val	Thr	His	Val	Ile	Val	Asp	Glu	Val
			100					105					110		
His	Glu	Arg	Asp	Arg	Phe	Ser	Asp	Phe	Leu	Leu	Thr	Lys	Leu	Arg	Asp
		115					120					125			
Leu	Leu	Gln	Lys	His	Pro	Thr	Leu	Lys	Leu	Ile	Leu	Ser	Ser	Ala	Ala
		130				135					140				
Xaa	Asp	Val	Asn	Leu	Phe	Ile	Arg	Tyr	Phe	Gly	Ser	Cys	Pro	Xaa	Ile
145					150					155					160
Tyr	Ile	Gln	Gly	Xaa	Pro	Phe	Glu	Val	Lys	Glu	Met	Phe	Leu	Glu	Asp
			165						170					175	
Ile	Leu	Xaa	Thr	Thr	Xaa	Xaa	Thr	Asn	Lys	Xaa	Met	Leu	Xaa	Tyr	Lys
			180					185					190		
Lys	Glu	Lys	Gln	Gln	Asp	Glu	Lys	Thr	Leu	Ser	Lys	Lys	Lys	Lys	Lys
		195					200					205			
Lys	Lys														
		210													

&lt;210&gt; 5634

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

## 4959

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (12)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5634

Xaa	Val	Arg	Tyr	Ile	Ala	Xaa	Xaa	Ser	Ala	Ala	Xaa	Arg	Lys	Arg	Xaa
1				5					10					15	

Val	Cys	Ser	Glu	Trp	Lys	Phe	Ala	Ala	Cys	Val	Val	Asp	Arg	Leu	Cys
			20					25					30		

Leu	Met	Ala	Phe	Ser	Val	Phe	Thr	Ile	Ile	Cys	Thr	Ile	Gly	Ile	Leu
		35					40					45			

Met	Ser	Ala	Pro	Asn	Phe	Val	Glu	Ala	Val	Ser	Lys	Asp	Phe	Ala
	50					55					60			

&lt;210&gt; 5635

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5635

Pro	Ser	Thr	Leu	Asp	Cys	Ser	Leu	Thr	Glu	Cys	Leu	Ser	Leu	Ser	Ile
1				5					10					15	

Leu	Cys	Pro	Phe	Tyr	Ser	Phe	Lys	Lys	Thr	Val	Ala	Val	Thr	Lys	Glu
			20					25					30		

Leu	Phe	Leu	Ile	Pro	Arg	Leu	Cys	Gln	Thr	Lys	Val	Ser	Ser	Leu	Arg
		35					40					45			

Leu	Leu	Asp	Phe	Asp	Ile	Lys	Tyr	Val	Phe	Ser	Ser	Ser	Asn	Phe	Ile
	50					55				60					

Tyr	Val	Tyr	Ser	Ser	Ser	Asp	Pro	Glu	Ile	Tyr	Phe	Leu	Leu	Ile	Ile
65						70				75				80	

Leu	Thr	Trp	Ile	Pro	Gln	Ala	Ile
							85

4960

&lt;210&gt; 5636

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5636

Pro Gly Xaa Pro Gly Arg Pro Thr Arg Pro Ala Arg Cys Gln Gln Pro  
 1 5 10 15

Gly Ala Arg Ser Gln Glu Gln Ser Ala Ser Met Asn Leu Gly Val Ser  
 20 25 30

Met Leu Arg Ile Leu Phe Leu Leu Asp Val Gly Gly Ala Gln Val Leu  
 35 40 45

Ala Thr Gly Lys Thr Pro Gly Ala Glu Ile Asp Phe Lys Tyr Ala Leu  
 50 55 60

Ile Gly Thr Ala Val Gly Val Ala Ile Ser Ala Gly Phe Leu Ala Leu  
 65 70 75 80

Lys Ile Cys Met Ile Arg Arg His Leu Phe Asp Asp Asp Ser Ser Asp  
 85 90 95

Leu Lys Ser Thr Pro Gly Gly Leu Ser Asp Thr Ile Pro Leu Lys Lys  
 100 105 110

Arg Ala Pro Arg Arg Asn His Asn Phe Ser Lys Arg Asp Ala Gln Val  
 115 120 125

Ile Glu Leu  
 130

&lt;210&gt; 5637

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5637

Pro Thr Arg Pro His Ser Ala Arg Leu Thr Met Cys His Ser Arg Ser  
 1 5 10 15

## 4961

Cys His Pro Thr Met Thr Ile Leu Gln Ala Pro Thr Pro Ala Pro Ser  
                   20                  25                  30  
 Thr Ile Pro Gly Pro Arg Arg Gly Ser Gly Pro Glu Ile Phe Thr Phe  
           35                  40                  45  
 Asp Pro Leu Pro Glu Pro Ala Ala Ala Pro Ala Gly Arg Pro Ser Ala  
       50                  55                  60  
 Ser Arg Gly His Arg Lys Arg Ser Arg Arg Val Leu Tyr Pro Arg Val  
   65                  70                  75                  80  
 Val Arg Arg Gln Leu Pro Val Glu Glu Pro Asn Pro Ala Lys Arg Leu  
                   85                  90                  95  
 Leu Phe Leu Leu Leu Thr Ile Val Phe Cys Gln Ile Leu Met Ala Glu  
                   100                  105                  110  
 Glu Gly Val Pro Ala Pro Leu Pro Pro Glu Asp Ala Pro Asn Ala Ala  
           115                  120                  125  
 Ser Leu Ala Pro Thr Pro Val Ser Pro Val Leu Glu Pro Phe Asn Leu  
       130                  135                  140  
 Thr Ser Glu Pro Ser Asp Tyr Ala Leu Asp Leu Ser Thr Phe Leu Gln  
   145                  150                  155                  160  
 Gln His Pro Ala Ala Phe  
                   165

&lt;210&gt; 5638

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5638

Gly Pro Ser Trp Arg Ser Asn Pro Arg Gly Arg Ser Ser Ser Thr Trp  
   1                  5                  10                  15  
 Ser Ser Ser Ser Pro Pro Arg Ser Arg Ser Arg Ser Arg Ser Ser Ser  
           20                  25                  30  
 Pro Asn Pro Ser Leu Ser Leu Ser Arg Asn Pro Ser Pro Asn His Asn  
       35                  40                  45  
 Pro Ser Leu Ser Pro Asn Pro Ser Leu Ser Pro Ser Ser Ser Thr Arg  
       50                  55                  60

[illegible]

<213> Homo sapiens

<223> Xaa equals any of the naturally occurring L-amino acids

Arg Arg Leu Asn Thr Cys Arg Lys Gln Met Phe Phe Gly Pro  
50 55 60

<212> PRT



4963

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5640

Ala Pro Ala Cys Gly Ala Xaa Ala Trp Lys Phe Leu Leu Gly Tyr Leu  
 1 5 10 15

Ser Trp Glu Gly Thr Ala Glu Glu His Lys Ala His Ile Arg Lys Lys  
 20 25 30

Thr Asp Glu Tyr Phe Arg Met Lys Leu Gln Trp Lys Ser Val Ser Pro  
 35 40 45

Glu Gln Glu Arg Arg Asn Ser Leu Leu His Gly Tyr Arg Ser Leu Ile  
 50 55 60

Glu Arg Asp Val Ser Arg Thr Asp Arg Thr Asn Lys Phe Tyr Glu Gly  
 65 70 75 80

Pro Glu Asn Pro Gly Leu Gly Leu Leu Asn Asp Ile Leu Leu Thr Tyr  
 85 90 95

Cys Met Tyr His Phe Asp Leu Gly Tyr Val Gln Gly Met Ser Asp Leu  
 100 105 110

Leu Ser Pro Ile Leu Tyr Val Ile Gln Asn Glu Val Asp Ala Phe Trp  
 115 120 125

Cys Phe Cys Gly Phe Met Glu Leu Val Gln Gly Asn Phe Glu Glu Ser  
 130 135 140

Gln Glu Thr Met Lys Arg Gln Leu Gly Arg Leu Leu Leu Leu Arg  
 145 150 155 160

Val Leu Asp Pro Leu Leu Cys Asp Phe Leu Asp Ser Gln Asp Ser Gly  
 165 170 175

Ser Leu Cys Phe Cys Phe Arg Trp Leu Leu Ile Trp Phe Lys Arg Glu  
 180 185 190

Phe Pro Phe Pro Asp Val Leu Arg Leu Trp Glu Val Leu Trp Thr Gly  
 195 200 205

Leu Pro Gly Pro Asn Leu His Leu Leu Val Ala Cys Ala Ile Leu Asp  
 210 215 220

Met Glu Arg Asp Thr Leu Met Leu Ser Gly Phe Gly Ser Asn Glu Ile

## 4964

225                      230                      235                      240  
 Leu Lys His Ile Asn Glu Leu Thr Met Lys Leu Ser Val Glu Asp Val  
                                  245                      250                      255  
 Leu Thr Arg Ala Glu Ala Leu His Arg Gln Leu Thr Ala Cys Pro Glu  
                                  260                      265                      270  
 Leu Pro His Asn Val Gln Glu Ile Leu Gly Leu Ala Pro Pro Ala Glu  
                                  275                      280                      285  
 Pro His Ser Pro Ser Pro Thr Ala Ser Pro Leu Pro Leu Ser Pro Thr  
                                  290                      295                      300  
 Arg Ala Pro Pro Thr Pro Pro Pro Ser Thr Asp Thr Ala Pro Gln Pro  
 305                                   310                      315                      320  
 Asp Ser Ser Leu Glu Ile Leu Pro Glu Glu Glu Asp Glu Gly Ala Asp  
                                  325                      330                      335

Ser

<210> 5641

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5641

Met Gln Leu Leu Leu Leu Thr Cys Leu Leu Gln Leu Ile Met Val Thr  
   1                      5                      10                      15  
 Asn Lys Ala Ile Ala Ser Gln Ile Ser Gln Ile Lys His Phe Phe His  
                                  20                      25                      30  
 Cys Ile Leu Val Val Val Cys Pro Asn Ser Ser Met Tyr Leu Ile Met  
                                  35                      40                      45  
 Ser Gly Ser Ile Leu His  
                                  50

<210> 5642

<211> 65

<212> PRT

<213> Homo sapiens

<220>

## 4965

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (51)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5642

Cys	Leu	Trp	Leu	Phe	Lys	Ser	Gln	Ser	Leu	Val	Asn	His	Ile	Thr	Ile
1				5					10					15	

Arg	Pro	Trp	Phe	Ser	Ile	Gly	Gly	Asp	Phe	Pro	Arg	Gly	Thr	Phe	Gly
			20					25					30		

His	Val	Leu	Glu	Ala	Phe	Trp	Leu	Ser	His	Trp	Xaa	Pro	Gly	Val	Xaa
		35					40					45			

Leu	Pro	Xaa	Thr	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Lys	Arg	Gly	Ala	Phe
	50					55					60				

Leu  
65

&lt;210&gt; 5643

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (32)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5643

Thr	Asn	Phe	Phe	Gln	Leu	Val	Lys	His	His	Thr	Ser	Ser	Ala	Lys	Gly
1				5					10					15	

Ile	Leu	Leu	Ala	Glu	Pro	Ser	Trp	Met	Ile	Ser	Val	Thr	His	Ala	Xaa
			20					25					30		

Thr	Cys	Ser	Leu	Glu	Gly	Ser	Gly	Glu	Trp	Ile	His	Ala	Ile	Cys	Leu
			35				40					45			

## 4966

Glu Asp Thr Arg Met Ser Gln Pro Pro Asp Leu Val Ile Tyr Lys Leu  
 50 55 60  
 Leu Arg Ile Thr Leu Val Tyr Phe Trp Ser Glu Asn Gly Lys Ala Gln  
 65 70 75 80  
 Ile Met Lys

<210> 5644  
 <211> 407  
 <212> PRT  
 <213> Homo sapiens

<400> 5644  
 Ala Ala Cys Gln Pro Arg Cys Cys Cys Ser Ser Cys Cys Gly Thr Ala  
 1 5 10 15  
 Asp Arg Ala Ala Ala Pro Leu Ser Pro Leu Gln Ala Pro Ile Trp Ala  
 20 25 30  
 Pro Ala Thr Ser Met Asp Ala Arg Arg Val Pro Gln Lys Asp Leu Arg  
 35 40 45  
 Val Lys Lys Asn Leu Lys Lys Phe Arg Tyr Val Lys Leu Ile Ser Met  
 50 55 60  
 Glu Thr Ser Ser Ser Ser Asp Asp Ser Cys Asp Ser Phe Ala Ser Asp  
 65 70 75 80  
 Asn Phe Ala Asn Thr Arg Leu Gln Ser Val Arg Glu Gly Cys Arg Thr  
 85 90 95  
 Arg Ser Gln Cys Arg His Ser Gly Pro Leu Arg Val Ala Met Lys Phe  
 100 105 110  
 Pro Ala Arg Ser Thr Arg Gly Ala Thr Asn Lys Lys Ala Glu Ser Arg  
 115 120 125  
 Gln Pro Ser Glu Asn Ser Val Thr Asp Ser Asn Ser Asp Ser Glu Asp  
 130 135 140  
 Glu Ser Gly Met Asn Phe Leu Glu Lys Arg Ala Leu Asn Ile Lys Gln  
 145 150 155 160  
 Asn Lys Ala Met Leu Ala Lys Leu Met Ser Glu Leu Glu Ser Phe Pro  
 165 170 175

## 4967

Gly Ser Phe Arg Gly Arg His Pro Leu Pro Gly Ser Asp Ser Gln Ser  
 180 185 190  
 Arg Arg Pro Arg Arg Arg Thr Phe Pro Gly Val Ala Ser Arg Arg Asn  
 195 200 205  
 Pro Glu Arg Arg Ala Arg Pro Leu Thr Arg Ser Arg Ser Arg Ile Leu  
 210 215 220  
 Gly Ser Leu Asp Ala Leu Pro Met Glu Glu Glu Glu Glu Glu Asp Lys  
 225 230 235 240  
 Tyr Met Leu Val Arg Lys Arg Lys Thr Val Asp Gly Tyr Met Asn Glu  
 245 250 255  
 Asp Asp Leu Pro Arg Ser Arg Arg Ser Arg Ser Ser Val Thr Leu Pro  
 260 265 270  
 His Ile Ile Arg Pro Val Glu Glu Ile Thr Glu Glu Glu Leu Glu Asn  
 275 280 285  
 Val Cys Ser Asn Ser Arg Glu Lys Ile Tyr Asn Arg Ser Leu Gly Ser  
 290 295 300  
 Thr Cys His Gln Cys Arg Gln Lys Thr Ile Asp Thr Lys Thr Asn Cys  
 305 310 315 320  
 Arg Asn Pro Asp Cys Trp Gly Val Arg Gly Gln Phe Cys Gly Pro Cys  
 325 330 335  
 Leu Arg Asn Arg Tyr Gly Glu Glu Val Arg Asp Ala Leu Leu Asp Pro  
 340 345 350  
 Asn Trp His Cys Pro Pro Cys Arg Gly Ile Cys Asn Cys Ser Phe Cys  
 355 360 365  
 Arg Gln Arg Asp Gly Arg Cys Ala Thr Gly Val Leu Val Tyr Leu Ala  
 370 375 380  
 Lys Tyr His Gly Phe Gly Asn Val His Ala Tyr Leu Lys Ser Leu Lys  
 385 390 395 400  
 Gln Glu Phe Glu Met Gln Ala  
 405

&lt;210&gt; 5645

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

4968

&lt;400&gt; 5645

Arg Glu Ala Ser Gly Ser Leu Trp Glu Gln Ser Tyr Lys Leu Ile Glu  
1 5 10 15

Ile His Thr Leu Pro Lys Gln Leu Gly Pro Thr Thr Val Pro His Val  
20 25 30

Ser Met Gln Asn Tyr Ile Leu Pro Arg Ile Asn Ser  
35 40

&lt;210&gt; 5646

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5646

Lys Met Xaa Leu Thr Leu Thr Lys Gly Asn Lys Ser Trp Ser Ser Thr  
1 5 10 15

Ala Val Xaa Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn  
20 25 30

Ser Ala Pro Leu Cys Met Tyr Ser Ser Leu Leu Pro Ser Ser Gln Leu  
35 40 45

Ser Val Arg Tyr Val Phe Leu Ser  
50 55

&lt;210&gt; 5647

&lt;211&gt; 35

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5647

Ser Val Cys Val His Thr Phe Tyr Phe Ser Val Ser Trp Val Tyr Val  
1 5 10 15

4969

Trp Leu Lys Thr Ile Leu Glu Ser Lys Ser Ile Leu Ile Tyr Lys Lys  
20 25 30

Thr Phe Trp  
35

&lt;210&gt; 5648

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5648

Gln Cys Pro Met Gly Pro Leu Leu Leu Pro Ala Pro Ser Leu Leu Leu  
1 5 10 15

Leu Met His Ser Pro Leu Pro Ala Ala Pro Gly Phe Pro Ala Phe Leu  
20 25 30

Leu Thr Pro Ser Asn Ser Leu Gly Thr Pro Ala Ala Thr Thr Leu Trp  
35 40 45

Val Gly His Trp Asp Pro Leu Ala Gln Ser Trp Leu Leu Leu Thr Pro  
50 55 60

Ser Leu Asp Ala Cys Pro Gly Thr Pro Ser Pro Leu Pro Leu Pro Cys  
65 70 75 80

Ser Phe Asn Arg Val Asn His Val Tyr Cys Thr Gly Ala Val Val Ile  
85 90 95

Ala Glu Thr Ala Gly Trp Arg Arg Ser Arg  
100 105

&lt;210&gt; 5649

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5649

Arg Asn Pro Lys Asn Gly Asn Asn Pro Ser His Gly Cys His Thr Leu  
1 5 10 15

Leu Thr Cys Ser Ile Pro Thr Gln Glu Leu Pro Ala Tyr Gly Ala Ser  
20 25 30

His Trp Ser Thr Ser Tyr Pro Gln His Leu Ser Cys His Cys Gln Gly

## 4970

35                      40                      45  
 Thr Tyr Leu Trp Pro Pro Ala Ile Leu Tyr Arg Ala Ile Val Leu Tyr  
     50                      55                      60  
 Ile Leu His Ile Arg Lys Leu Arg Leu Lys Val Asn Leu Ile Cys Leu  
     65                      70                      75                      80  
 Cys Gln Ser Gln Asp  
                             85

<210> 5650  
 <211> 269  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (4)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (177)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5650  
 Gly Pro Tyr Xaa Tyr Phe Leu Pro Gly Glu Cys Leu Asp Cys Ser Pro  
     1                      5                      10                      15  
 Leu Leu Val Leu Gln Gly Val Thr His Ala Ala Ile Trp Ala Ala Cys  
                     20                      25                      30  
 Ile Ser Tyr Leu Ser Ala Ala Val Pro Pro Glu Leu Arg Thr Ser Ala  
             35                      40                      45  
 Gln Gly Ile Leu Gln Gly Leu His Leu Gly Leu Gly Arg Gly Cys Gly  
     50                      55                      60  
 Ala Met Ile Gly Gly Val Leu Val Asn Tyr Phe Gly Ala Ala Ala Thr  
     65                      70                      75                      80  
 Phe Arg Gly Ile Gly Met Ala Cys Leu Val Ile Leu Leu Leu Phe Ala  
                     85                      90                      95  
 Leu Ile Gln Trp Leu Ala Val Pro Asp Glu Glu Glu Asp Lys Thr Met  
             100                      105                      110  
 Leu Ala Glu Arg Ile Pro Val Pro Ser Ser Pro Val Pro Ile Ala Thr



## 4971

115		120		125
Ile Asp Leu Val Gln Gln Gln Thr Glu Asp Val Met Pro Arg Ile Glu				
130		135		140
Pro Arg Leu Pro Pro Lys Lys Thr Lys His Gln Glu Glu Gln Glu Asp				
145		150		155
				160
Val Asn Lys Pro Ala Trp Gly Val Ser Ser Ser Pro Trp Val Thr Phe				
	165		170	175
Xaa Tyr Ala Leu Tyr Gln Ile Lys Glu Met Met Gln Leu Thr Arg Asp				
	180		185	190
Asn Arg Ala Ser Glu Ile Gln Pro Leu Gln Gly Thr Asn Glu Asn Arg				
	195		200	205
Glu Asn Ser Pro Ala Gly Arg Ala Gln Pro Val Pro Cys Glu Thr His				
	210		215	220
Ser Asp Pro Ser Arg Asn Gln Pro Ser Pro Asp Ala Ala Ala Ser Gln				
	225		230	235
				240
Thr Gln Thr Ser Pro Ala His Pro Ser Val Asp Pro Cys Thr Glu Glu				
	245		250	255
Ser Glu Glu Gln Gln Ala Gln Leu Ala Ala Gly Gly His				
	260		265	

&lt;210&gt; 5651

&lt;211&gt; 364

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5651

Cys Leu Arg Lys Ser Phe Glu Met Thr Val Glu Lys Val Gln Gly Ile				
1		5		10
				15
Ser Arg Leu Glu Gln Leu Cys Glu Glu Phe Ser Glu Glu Glu Arg Val				
	20		25	30
Arg Glu Leu Lys Gln Glu Lys Lys Arg Gln Lys Arg Lys Asn Arg Arg				
	35		40	45
Lys Asn Lys Cys Val Cys Asp Ile Pro Thr Pro Leu Gln Thr Ala Asp				
	50		55	60
Glu Lys Glu Val Ser Gln Glu Lys Glu Thr Asp Phe Ile Glu Asn Ser				
	65		70	75
				80

4972

Ser Cys Lys Ala Cys Gly Ser Thr Glu Asp Gly Asn Thr Cys Val Glu  
                             85                            90                            95  
 Val Ile Val Thr Asn Glu Asn Thr Ser Cys Thr Cys Pro Ser Ser Gly  
                             100                            105                            110  
 Asn Leu Leu Gly Ser Pro Lys Ile Lys Lys Gly Leu Ser Pro His Cys  
                             115                            120                            125  
 Asn Gly Ser Asp Cys Gly Tyr Ser Ser Ser Met Glu Gly Ser Glu Thr  
                             130                            135                            140  
 Gly Ser Arg Glu Gly Ser Asp Val Ala Cys Thr Glu Gly Ile Cys Asn  
                             145                            150                            155                            160  
 His Asp Glu His Gly Asp Asp Ser Cys Val His His Cys Glu Asp Lys  
                             165                            170                            175  
 Glu Asp Asp Gly Asp Ser Cys Val Glu Cys Trp Ala Asn Ser Glu Glu  
                             180                            185                            190  
 Asn Asp Thr Lys Gly Lys Asn Lys Lys Lys Lys Lys Ser Lys Ile  
                             195                            200                            205  
 Leu Lys Cys Asp Glu His Ile Gln Lys Leu Gly Ser Cys Ile Thr Asp  
                             210                            215                            220  
 Pro Gly Asn Arg Glu Thr Ser Gly Asn Thr Met His Thr Val Phe His  
                             225                            230                            235                            240  
 Arg Asp Lys Thr Lys Asp Thr His Pro Glu Ser Cys Cys Ser Ser Glu  
                             245                            250                            255  
 Lys Gly Gly Gln Pro Leu Pro Trp Phe Glu His Arg Lys Asn Val Pro  
                             260                            265                            270  
 Gln Phe Ala Glu Pro Thr Glu Thr Leu Phe Gly Pro Asp Ser Gly Lys  
                             275                            280                            285  
 Gly Ala Lys Ser Leu Val Glu Leu Leu Asp Glu Ser Glu Cys Thr Ser  
                             290                            295                            300  
 Asp Glu Glu Ile Phe Ile Ser Gln Asp Glu Ile Gln Ser Phe Met Ala  
                             305                            310                            315                            320  
 Asn Asn Gln Ser Phe Tyr Ser Asn Arg Glu Gln Tyr Arg Gln His Leu  
                             325                            330                            335  
 Lys Glu Lys Phe Asn Lys Tyr Cys Arg Leu Asn Asp His Lys Arg Pro  
                             340                            345                            350

4973

Ile Cys Ser Gly Trp Leu Thr Thr Ala Gly Ala Asn  
 355 360

&lt;210&gt; 5652

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5652

Ala Thr Leu Trp Asp Gly His Ala Ala Val Trp His Gly Tyr Glu Val  
 1 5 10 15

His Gly Met Glu Lys Ile Pro Glu Asp Gly Pro Ala Leu Ile Ile Phe  
 20 25 30

Tyr His Gly Ala Ile Pro Ile Asp Phe Tyr Tyr Phe Met Ala Lys Ile  
 35 40 45

Phe Ile His Lys Gly Arg Thr Cys Arg Val Val Ala Asp His Phe Val  
 50 55 60

Phe Lys Ile Gln Gly Leu Val Tyr Tyr Trp Met Cys Phe Val Leu Tyr  
 65 70 75 80

Met Asp Gln Glu Lys Asn Val Leu Lys Phe  
 85 90

&lt;210&gt; 5653

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5653

His Ser Xaa Met Trp Leu Val His Leu Thr Arg Glu Glu Trp Gly Tyr  
 1 5 10 15

Leu Asp Pro Val Gln Arg Asp Leu Tyr Arg Glu Val Met Leu Glu Asn  
 20 25 30

Tyr Gly Asn Val Val Ser Leu Gly Ile Leu Leu Arg Leu Pro Thr Thr  
 35 40 45

4974

Arg Ile His Ser Val Asn Ser Cys Pro Ala Leu Ser His Thr Gln Ala  
 50 55 60

Ser Ala Phe Ser Gly Glu Thr Leu Ala Val Leu Thr Ala Gly Ile Ser  
 65 70 75 80

Lys Arg Trp Pro Lys Tyr Arg Leu Pro Ile Asp Ile Ala Arg Pro Cys  
 85 90 95

Ser Glu Thr Pro Phe Pro Arg Leu  
 100

<210> 5654

<211> 49

<212> PRT

<213> Homo sapiens

<400> 5654

Pro Leu Lys Thr Phe Pro Val Cys Leu Val Ile Ala Lys Pro Arg Lys  
 1 5 10 15

Ile Ser Phe Leu Ser Ser Tyr Arg Glu Leu Ala Met Lys Leu Lys Phe  
 20 25 30

Asn Cys Val Ser Arg Ser Leu Ile Phe Leu Gln Ile Ile Asn Tyr Val  
 35 40 45

Leu

<210> 5655

<211> 40

<212> PRT

<213> Homo sapiens

<400> 5655

Lys Leu Asp Phe Lys Ile Thr Asn Glu Arg Asn Leu Ile Leu Phe Cys  
 1 5 10 15

Asp Arg Ser Gln Val Leu Gln Trp Phe Ala Ile Gln Asn Leu Ile Ile  
 20 25 30

Val Lys Pro Gln Phe Lys Arg Leu  
 35 40

## 4975

&lt;210&gt; 5656

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5656

Gly Tyr Leu Cys Leu Leu Cys Ile Leu Val Met Ala Arg Ser Arg Leu  
 1 5 10 15

Ser Thr Thr Gly Arg His Pro Ala Val Val Ser Leu Leu Glu Leu Asn  
 20 25 30

Val Trp Leu Ser Lys Ile Leu Ser Ile Glu Ser Leu Ser Leu Lys Xaa  
 35 40 45

Leu Leu Gln Met Asn Ala Gln His Glu Ile Phe Lys Ile Val Ser Tyr  
 50 55 60

Thr Leu Gly Ser Asn Lys Gln Lys Ile Leu  
 65 70

&lt;210&gt; 5657

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5657

Phe Ser Val Thr Gly Gln Ala Pro Val Glu Ile Ser Phe Val Leu Leu  
 1 5 10 15

Trp Ala Gln Arg Trp Trp Trp Phe Gly Ser Ser Glu Asp Cys Leu Gly  
 20 25 30

Arg Phe Ser Gly His Gly Ala Leu Cys Trp Pro Gly Trp Gly Trp Pro  
 35 40 45

Arg Arg Cys Pro Phe Pro Gly Ala Leu Trp Trp Leu Gln Lys Thr Ser  
 50 55 60

Phe Val Glu Asn Cys Phe Ser Ala Trp Asn Gln Thr Ser Ser Arg Trp  
 65 70 75 80

Phe Gly Pro Cys Pro Cys Val Gly His Tyr His Thr Lys Arg Pro Ile

## 4976

	85		90		95
Lys Ile Lys Lys Ile Lys Lys Lys Lys Thr Asn Tyr Trp Arg Trp Trp					
	100		105		110
Pro Met Met His Leu Leu Phe Ala Gly					
	115		120		

<210> 5658  
<211> 25  
<212> PRT  
<213> Homo sapiens

<400> 5658  
Trp Thr Pro Val Ile Pro Gly Thr Arg Glu Ala Glu Ala Gly Glu Ser  
1 5 10 15  
Leu Glu Pro Gly Arg Gln Arg Leu Gln  
20 25

<210> 5659  
<211> 52  
<212> PRT  
<213> Homo sapiens

<400> 5659  
Ser Ile Asp Thr Phe Tyr Ile Gln Phe Tyr Lys Tyr Lys Tyr Tyr Asn  
1 5 10 15  
Phe Ile Leu Met Val Pro Lys Ile His Phe Leu Arg Leu Lys Ala Cys  
20 25 30  
Thr Ser Met His Thr Cys Phe Trp Gly Glu Trp Gly Glu Asp Ile Leu  
35 40 45  
Ile Ile Ser Leu  
50

<210> 5660  
<211> 49  
<212> PRT  
<213> Homo sapiens

<400> 5660  
Tyr Ile Phe Leu Ile Ser Tyr Arg Leu Tyr Arg Lys Glu Val Leu Glu

4977

1	5	10	15												
Lys	Leu	Ile	Glu	Lys	Cys	Val	Ser	Lys	Gly	Tyr	Val	Phe	Gln	Met	Glu
	20							25					30		
Met	Ile	Val	Arg	Ala	Arg	Gln	Leu	Asn	Tyr	Thr	Ile	Gly	Glu	Val	Cys
	35						40					45			

Asn

&lt;210&gt; 5661

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (115)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (117)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (118)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (156)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (194)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (217)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (218)

## 4978

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5661

Gln	Trp	Val	Ala	Tyr	Gly	Ser	Glu	Pro	His	Thr	Ser	Val	Pro	Val	Pro
1				5					10				15		
Ala	Gly	Ser	Leu	Pro	Asp	His	Ala	Val	His	Arg	Pro	His	Asp	Arg	Cys
			20					25					30		
Ala	Arg	Ser	Gly	Val	Met	Pro	Pro	Ala	Gln	Leu	Thr	Thr	Ile	Asn	Gln
		35					40					45			
Ser	Gln	Leu	Ser	Ala	Gln	Leu	Gly	Leu	Asn	Leu	Gly	Gly	Ala	Ser	Met
	50					55					60				
Pro	His	Thr	Ser	Pro	Ser	Pro	Pro	Ala	Ser	Lys	Ser	Ala	Thr	Pro	Ser
65					70					75					80
Pro	Ser	Ser	Ser	Ile	Asn	Glu	Glu	Asp	Ala	Asp	Glu	Ala	Asn	Arg	Ala
				85					90					95	
Ile	Gly	Glu	Lys	Arg	Ala	Ala	Pro	Asp	Ser	Gly	Lys	Lys	Pro	Lys	Thr
			100					105					110		
Pro	Lys	Xaa	Lys	Xaa	Xaa	Lys	Asp	Pro	Asn	Glu	Pro	Gln	Lys	Pro	Val
		115					120					125			
Ser	Ala	Tyr	Ala	Leu	Phe	Phe	Arg	Asp	Thr	Gln	Ala	Ala	Ile	Lys	Gly
	130					135					140				
Gln	Asn	Pro	Asn	Ala	Thr	Phe	Gly	Glu	Val	Ser	Xaa	Ile	Val	Ala	Ser
145					150					155					160
Met	Trp	Asp	Ser	Leu	Gly	Glu	Glu	Gln	Lys	Gln	Val	Tyr	Lys	Arg	Lys
				165					170					175	
Thr	Glu	Ala	Ala	Lys	Lys	Glu	Tyr	Leu	Lys	Ala	Leu	Ala	Ala	Tyr	Arg
			180					185					190		
Ala	Xaa	Leu	Val	Ser	Lys	Ala	Ala	Ala	Glu	Ser	Ala	Glu	Ala	Gln	Thr
		195					200					205			
Ile	Arg	Ser	Val	Gln	Gln	Thr	Leu	Xaa	Xaa	Thr	Asn	Leu	Thr		
	210					215					220				

<210> 5662

<211> 48

<212> PRT

<213> Homo sapiens



4979

&lt;400&gt; 5662

Arg Tyr Ile Ile Thr Lys Leu Lys Leu Cys Phe Cys Phe Ile Gln Arg  
 1 5 10 15

Asn Leu Lys Ile Ile Asp Lys Lys Phe Leu Phe Arg Ala Met Ser Leu  
 20 25 30

Tyr His Thr Leu Gly Asn Glu Thr Leu Ser Tyr Val Leu Ser Asp Asn  
 35 40 45

&lt;210&gt; 5663

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5663

Lys Leu Arg Tyr Ile Leu Pro Lys Asn Phe Phe Asn Lys Ile Ala Lys  
 1 5 10 15

Asn Ile Leu Phe Arg His Phe Asn Val Pro Ile Tyr Asn Trp Ile Phe  
 20 25 30

Ser Leu Asn Ser Thr Gln Ser Cys Gly Phe Tyr Phe Gln Leu Ile Phe  
 35 40 45

Phe Leu Val Gly Ser Val His Gly Ile Ile Ser Leu Ser Arg Gly Leu  
 50 55 60

Ser Cys Met Cys Ala Glu Phe Val Lys Glu Ser Ile Gly Arg Cys Arg  
 65 70 75 80

Arg Pro Arg Phe Ala Phe Lys Val Phe Phe Arg Leu Cys Gly  
 85 90

&lt;210&gt; 5664

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5664

Gly Val Phe Ala Ala Met Tyr Ser Tyr Ser Ser Met Leu Thr Leu Pro  
 1 5 10 15

## 4980

Phe Asp Val Val Gln Asn Leu Asp Leu Ser Pro Trp Ile Ser Pro Val  
                   20                                  25                                  30  
 Val Pro Ala Ser Arg Gly Ile Phe Leu His Val Ser Gln Pro Pro Ser  
                   35                                  40                                  45  
 Cys Ser Arg Val Leu Leu Asp Leu Gly Phe Ser Cys Pro Ser Leu Leu  
                   50                                  55                                  60  
 Gly  
 65

&lt;210&gt; 5665

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (95)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (103)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5665

Ile Ser Asn Thr Ser Ser Asp Cys Arg Pro Ser Glu Glu Ser Glu Leu  
   1                                  5                                  10                                  15  
 Leu Thr Asp Thr Thr Thr Asn Ile Leu Ser Gly Thr Thr Ser Thr Val  
                   20                                  25                                  30  
 Glu Ser Asp Ile Leu Thr Gln Thr Asp Arg Glu Val Ala Leu His Glu  
                   35                                  40                                  45  
 Arg Ser Ser Ser Val Ser Thr Ile Asp Thr Ala Arg Leu Ile Gln Ala  
                   50                                  55                                  60  
 Phe Gly His Glu Arg Val Cys Leu Ser Pro Arg Arg Ile Lys Leu Tyr  
   65                                  70                                  75                                  80  
 Ser Ser Ile Thr Asn Gln Gln Arg Arg Tyr Leu Glu Glu Ala Xaa Lys  
                   85                                  90                                  95  
 His Ser Lys Lys Val Leu Xaa Tyr Arg Ser Ser Pro Ser Asp Phe  
                   100                                  105                                  110

4981

&lt;210&gt; 5666

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (80)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (91)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (106)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (112)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5666

Gly	Pro	Ser	Trp	Val	Arg	Leu	Gly	Leu	Ser	Trp	Ala	Leu	Tyr	Val	Phe
1				5					10					15	

Trp	Ile	Gln	Gly	Tyr	Trp	Ala	Arg	Tyr	Val	Cys	Gly	Xaa	Ile	Pro	Ser
		20						25					30		

Leu	Pro	Gln	Pro	His	Leu	Pro	Leu	Lys	Pro	Ser	Leu	Ala	Leu	Ser	Glu
		35					40					45			

Leu	Pro	Phe	Leu	Leu	Pro	Ser	Leu	Pro	Ser	Ala	Gln	Cys	Pro	Thr	Trp
		50				55					60				

Leu	Phe	Cys	Tyr	Phe	Gly	Ser	Gly	Gly	Thr	Ser	Trp	Glu	Cys	Glu	Xaa
65					70					75					80

Pro	Tyr	Arg	Lys	Ile	Ala	Leu	Gln	Glu	Glu	Xaa	Leu	Gln	Gly	Thr	Ile
				85					90					95	

## 4982

Leu Asn Pro Lys Ala Trp Asn Leu Leu Xaa His Phe Thr Phe Val Xaa  
 100 105 110

Lys Gly Leu Leu Asn Ala Leu Glu Lys Asp Leu Gly Pro Glu Leu Leu  
 115 120 125

Ser

<210> 5667

<211> 124

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5667

Pro Ile His Glu Leu Met Pro Glu Asp Arg Ala Ser Thr Pro Arg Thr  
 1 5 10 15

Thr Thr Met Thr Phe Thr Cys Xaa Xaa Phe Phe Asp Leu Phe Asn Ala  
 20 25 30

Leu Thr Cys Arg Ser Gln Thr Lys Leu Ile Phe Glu Ile Gly Phe Leu  
 35 40 45

Arg Asn His Met Phe Leu Tyr Ser Val Leu Gly Ser Ile Leu Gly Gln  
 50 55 60

Leu Ala Val Ile Tyr Ile Pro Pro Leu Gln Arg Val Phe Gln Thr Glu  
 65 70 75 80

Asn Leu Gly Ala Leu Asp Leu Leu Phe Leu Thr Gly Leu Ala Ser Ser  
 85 90 95

Val Phe Ile Leu Ser Glu Leu Leu Lys Leu Cys Glu Lys Tyr Cys Cys  
 100 105 110

Ser Pro Lys Arg Val Gln Met His Pro Glu Asp Val  
 115 120

4983

&lt;210&gt; 5668

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5668

Val	Ser	Val	Lys	Gln	Phe	Tyr	Phe	Ser	Tyr	Val	Thr	Val	Ala	Gly	Tyr
1				5					10					15	

Asp	Leu	Asn	Phe	Val	Phe	Arg	Pro	Pro	Ala	Arg	Ile	Leu	Cys	Leu	Leu
			20					25					30		

Leu	Tyr	Ser	Arg	Ser	Val	Phe	Leu	Pro	Arg	Leu	Arg	His	Arg	Gly	Pro
		35					40					45			

Gln	Pro
	50

&lt;210&gt; 5669

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (63)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (97)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (154)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5669

Leu	Leu	His	Leu	Ile	Leu	Tyr	Met	Ser	Asn	Ala	Ser	Phe	Leu	Ser	Val
1				5					10					15	

## 4984

Cys Leu Leu Ala Glu Asn Pro Val Gln Leu Ser Pro Gly Cys His Gly  
                   20                  25                  30  
 Lys Tyr Asp Lys Glu Xaa Thr Leu Gly Leu Gly Leu Lys Gly Leu Val  
                   35                  40                  45  
 Ile Gln Lys Thr Arg Glu Gly Cys Thr Cys Arg Val Ile Tyr Xaa Arg  
                   50                  55                  60  
 Asn Leu Ile Lys Tyr Leu Ala His Arg Ser Tyr Lys Glu Ser Phe Gln  
                   65                  70                  75                  80  
 Arg Gly Pro Leu Ala Thr Ala Gly Phe Phe Val Arg Asn Ile Cys Val  
                   85                  90                  95  
 Xaa Phe Tyr Pro Arg Glu Gln Asn Pro Arg Lys Gly Ser Phe Ile Ile  
                   100                  105                  110  
 Tyr Ser His Phe Ser Ser Phe Leu Asn Lys Thr Phe Ser Ser Arg Asn  
                   115                  120                  125  
 Thr Ala Phe Glu Gly Leu Cys Phe Met Gln Pro Ala Ser Leu Val Asp  
                   130                  135                  140  
 Leu Phe Thr Arg Ser His Gln Val Ile Xaa Ser Ile Leu Gly Arg Trp  
                   145                  150                  155                  160  
 Arg Lys Gln Thr Asp Thr Val Ser Arg Cys  
                   165                  170

&lt;210&gt; 5670

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (61)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (75)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5670

Tyr Val Leu Ser Ala Phe Arg Gly Leu Ser Arg Val Ile Asp Arg His  
           1                  5                  10                  15

## 4985

Leu Asn Glu Ala Leu Ser Phe Leu Lys Cys Lys Val Gly Glu Thr Gln  
                   20                  25                  30  
 Asp Thr Arg Lys Arg Lys Asp Ile Val His Ile Val Val Ala Val Ala  
                   35                  40                  45  
 Leu Arg Thr Val Leu Ala Arg Asp Arg Leu Gly Ile Xaa Ile Asn Pro  
                   50                  55                  60  
 Gly His Trp Gly Ser Phe Ser Gly Ser Leu Xaa Leu Ser Leu Pro Gly  
                   65                  70                  75                  80  
 Ser Thr His

&lt;210&gt; 5671

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (96)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5671

Val His Phe Ile Ser Thr Phe Tyr Tyr Ile Tyr Leu Ile Ala Gln Val  
           1                  5                  10                  15  
 Leu Leu Ser Arg Lys Lys Trp Asp Val Ala Asn Thr Ala Leu Leu Ala  
                   20                  25                  30  
 Cys Arg Gln Cys Cys Pro Val Asn Arg Leu Lys Cys Ile Phe Ile Ser  
                   35                  40                  45  
 Trp Tyr Ile Asn Leu Arg Lys Glu Lys Lys Lys Lys Lys Lys Lys Lys  
           50                  55                  60  
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
           65                  70                  75                  80  
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Xaa  
                   85                  90                  95  
 Gly Gly

4986

&lt;210&gt; 5672

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5672

Val Phe Leu Thr Tyr Ser Gly Gly Asp Ser Val Met Gln Ile Val Met  
1 5 10 15

Phe Asp Arg Gln Ser Ile Phe Ile His Gly Met Lys Ile Ser Leu Gln  
20 25 30

Gln Arg Ile Pro Gly Val Ser Ile Gln Gly Ala Ser Gln Ala Asp Glu  
35 40 45

Leu Trp Gln Lys Leu Glu Ser Tyr Pro Glu Ala Leu Val Met Leu Asp  
50 55 60

Gly Asp Gln Asp Gly Glu Phe Cys Tyr Trp Leu Leu Gln Lys Thr Val  
65 70 75 80

Val Gln Phe Pro Glu Val Lys Val Leu Ile Thr Ala Thr Asp Cys Asn  
85 90 95

Lys Arg Trp Leu Gln Glu Val Ile His Phe Asn Val Leu Ala Ile Val  
100 105 110

Pro Arg Asp Ser Thr Val Glu Thr Phe Ala Leu Ala Val Asn Ser Ala  
115 120 125

Ala Met Gly Met Met Phe Leu Pro Gly Asp Trp Arg Thr Thr Pro Glu  
130 135 140

Lys Asp Ile Lys Asp Leu Lys Ser Leu Ser Ala Arg Gln Arg Glu Ile  
145 150 155 160

Leu Thr Met Leu Ala Ala Gly Glu Ser Asn Lys Glu Ile Gly Arg Ala  
165 170 175

Leu Asn Ile Ser Thr Gly Thr Val Lys Ala His Leu Glu Ser Leu Tyr  
180 185 190

Arg Arg Leu Glu Val Lys Asn  
195

&lt;210&gt; 5673

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



4987

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (166)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (172)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5673

Ile	Met	Leu	His	Ala	Glu	Ala	Pro	Ala	Pro	Ala	Arg	Phe	Pro	Ala	Phe
1				5					10					15	

Ser	Met	Gly	His	Gly	Gly	Ala	Phe	Gly	Glu	Gly	Leu	Cys	Gly	Phe	Pro
			20					25					30		

Pro	Lys	Ser	Arg	Leu	Met	Pro	Leu	Ile	Pro	Ser	Gln	Glu	Val	Ala	Glu
	35						40					45			

Gly	Leu	Gly	Ser	Val	Gln	Ala	Pro	Arg	Gly	Gly	Asp	Val	Gln	Val	Lys
	50					55					60				

Gln	Gly	Val	Cys	Arg	Arg	Arg	Gly	Ser	Leu	Pro	Trp	Ala	Gly	Cys	Gln
65					70					75					80

His	Leu	Gly	Val	Pro	Gly	Cys	Gln	Glu	Lys	Phe	Thr	His	Thr	Arg	Ala
				85					90					95	

Leu	Leu	Ala	Lys	Gly	Glu	Ser	Tyr	Asp	Gly	Arg	Ala	Arg	Ala	Leu	Ser
			100					105					110		

Arg	His	Gln	Val	Cys	Ser	Gln	Ser	Ser	Arg	Ser	Ala	Pro	Val	Thr	Trp
		115					120					125			

Asn	Arg	Pro	Ala	Phe	Arg	Gly	Leu	Ser	Phe	Leu	Ile	Cys	Leu	Met	Gly
		130				135					140				

Ile	Ala	Ile	Pro	Thr	Phe	Pro	Val	Leu	Val	Gly	Phe	Ser	Leu	Asp	Ala
145					150					155				160	

Gln	Glu	Thr	Ala	Ala	Xaa	Glu	Gly	Leu	Phe	Gly	Xaa	Leu	Phe	His	Val
			165					170						175	

Thr	Pro	Leu	Leu	Pro	Cys	Pro	His	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Trp
		180						185					190		

4988

&lt;210&gt; 5674

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (34)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5674

Leu Cys Asn Cys Ile Thr Val Thr Asn Glu Ile Leu Ser Leu Leu Leu  
1 5 10 15

Ser Ile Cys Pro Lys Lys Pro Pro Pro His Val Leu Ser Gly Glu Leu  
20 25 30

Pro Xaa His Phe Trp Xaa Thr Ala Gln Ile Asn Ser  
35 40

&lt;210&gt; 5675

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5675

Glu Tyr Ser Ser Leu Ser Pro Arg Ile Asp Ser Ile Thr Gln Ser Asn  
1 5 10 15

Ile Asn Leu Asn Gly Leu Ala Pro Ser Phe Phe Ser Lys Asn Asn Gln  
20 25 30

Leu Ile Lys Lys Lys Phe Glu Gly Leu Asn Tyr Phe Asn Gly Cys Leu  
35 40 45

Lys Tyr Ser Val Gln Phe Val Pro Val Ser Ser Leu Ser Val Trp Gly  
50 55 60

Arg Ile Lys Tyr Cys Ala Lys Leu Val Leu Gly Tyr Ile Leu Gln His  
65 70 75 80

Leu Val Phe Tyr Leu Thr Asn Arg Ile Leu Val Pro

4989

85

90

&lt;210&gt; 5676

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5676

Ala	Arg	Met	Phe	Thr	Phe	Gly	Arg	Leu	Phe	Gln	Ile	Ile	Thr	Val	Val
1				5					10					15	

Thr	Cys	Leu	Gln	Phe	Ile	Gln	Asp	Cys	Cys	Ile	His	Ser	Arg	Gln	Ile
		20					25						30		

Asn	Ser	Leu	Leu	Glu	Thr	Ser	Ser	Leu	Ser	Arg	Cys	Leu	Glu	Xaa	Pro
		35					40					45			

Asp	Val	Cys
	50	

&lt;210&gt; 5677

&lt;211&gt; 486

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (197)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (203)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (483)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5677

Gln	Val	Gln	Ile	Arg	Ile	Leu	Asp	Val	Asn	Asp	Asn	Ile	Pro	Val	Val
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 4990

1	5	10	15
Glu Asn Lys Val Leu Glu Gly Met Val Glu Glu Asn Gln Val Asn Val	20	25	30
Glu Val Thr Arg Ile Lys Val Phe Asp Ala Asp Glu Ile Gly Ser Asp	35	40	45
Asn Trp Leu Ala Asn Phe Thr Phe Ala Ser Gly Asn Glu Gly Gly Tyr	50	55	60
Phe His Ile Glu Thr Asp Ala Gln Thr Asn Glu Gly Ile Val Thr Leu	65	70	75
Ile Lys Glu Val Asp Tyr Glu Glu Met Lys Asn Leu Asp Phe Ser Val	85	90	95
Ile Val Ala Asn Lys Ala Ala Phe His Lys Ser Ile Arg Ser Lys Tyr	100	105	110
Lys Pro Thr Pro Ile Pro Ile Lys Val Lys Val Lys Asn Val Lys Glu	115	120	125
Gly Ile His Phe Lys Ser Ser Val Ile Ser Ile Tyr Val Ser Glu Ser	130	135	140
Met Asp Arg Ser Ser Lys Gly Gln Ile Ile Gly Asn Phe Gln Ala Phe	145	150	155
Asp Glu Asp Thr Gly Leu Pro Ala His Ala Arg Tyr Val Lys Leu Glu	165	170	175
Asp Arg Asp Asn Trp Ile Ser Val Asp Ser Val Thr Ser Glu Ile Lys	180	185	190
Leu Ala Lys Leu Xaa Asp Phe Glu Ser Arg Xaa Val Gln Asn Gly Thr	195	200	205
Tyr Thr Val Lys Ile Val Ala Ile Ser Glu Asp Tyr Pro Arg Lys Thr	210	215	220
Ile Thr Gly Thr Val Leu Ile Asn Val Glu Asp Ile Asn Asp Asn Cys	225	230	235
Pro Thr Leu Ile Glu Pro Val Gln Thr Ile Cys His Asp Ala Glu Tyr	245	250	255
Val Asn Val Thr Ala Glu Asp Leu Asp Gly His Pro Asn Ser Gly Pro	260	265	270
Phe Ser Phe Ser Val Ile Asp Lys Pro Pro Gly Met Ala Glu Lys Trp			

## 4991

275					280					285									
Lys	Ile	Ala	Arg	Gln	Glu	Ser	Thr	Ser	Val	Leu	Leu	Gln	Gln	Ser	Glu				
290					295					300									
Lys	Lys	Leu	Gly	Arg	Ser	Glu	Ile	Gln	Phe	Leu	Ile	Ser	Asp	Asn	Gln				
305					310					315					320				
Gly	Phe	Ser	Cys	Pro	Glu	Lys	Gln	Val	Leu	Thr	Leu	Thr	Val	Cys	Glu				
					325					330					335				
Cys	Leu	His	Gly	Ser	Gly	Cys	Arg	Glu	Ala	Gln	His	Asp	Ser	Tyr	Val				
					340					345					350				
Gly	Leu	Gly	Pro	Ala	Ala	Ile	Ala	Leu	Met	Ile	Leu	Ala	Phe	Leu	Leu				
					355					360					365				
Leu	Leu	Leu	Val	Pro	Leu	Leu	Leu	Leu	Met	Cys	His	Cys	Gly	Lys	Gly				
					370					375					380				
Ala	Lys	Gly	Phe	Thr	Pro	Ile	Pro	Gly	Thr	Ile	Glu	Met	Leu	His	Pro				
385					390					395					400				
Trp	Asn	Asn	Glu	Gly	Ala	Pro	Pro	Glu	Asp	Lys	Val	Val	Pro	Ser	Phe				
					405					410					415				
Leu	Pro	Val	Asp	Gln	Gly	Gly	Ser	Leu	Val	Gly	Arg	Asn	Gly	Val	Gly				
					420					425					430				
Gly	Met	Ala	Lys	Glu	Ala	Thr	Met	Lys	Gly	Ser	Ser	Ser	Ala	Ser	Ile				
					435					440					445				
Val	Lys	Gly	Gln	His	Glu	Met	Ser	Glu	Met	Asp	Gly	Arg	Trp	Glu	Glu				
					450					455					460				
His	Arg	Ser	Leu	Leu	Ser	Gly	Arg	Ala	Thr	Gln	Phe	Thr	Gly	Ala	Thr				
465					470					475					480				
Gly	Ala	Xaa	His	Asp	His														
					485														

&lt;210&gt; 5678

&lt;211&gt; 311

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (135)

## 4992

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (175)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5678

Ala Ile Val Pro Ser Trp Asp Leu Asp Lys Asp Thr Ile Ser Leu Leu  
1 5 10 15

Ser Pro Val Leu Cys Ile Phe Pro Ser Pro Ser Ser Gln Thr Ser Leu  
20 25 30

Leu Tyr Val Phe Ser Leu Ala Gly Arg Met Thr Gln Asn Thr Val Ile  
35 40 45

Val Asn Gly Val Ala Met Ala Ser Arg Pro Ser Gln Pro Thr His Val  
50 55 60

Asn Val His Ile His Gln Glu Ser Ala Leu Thr Gln Leu Leu Lys Ala  
65 70 75 80

Gly Gly Ser Leu Lys Lys Phe Leu Phe His Pro Gly Asp Thr Val Pro  
85 90 95

Ser Thr Ala Arg Ile Gly Tyr Glu Gln Leu Ala Leu Gly Val Thr Gln  
100 105 110

Ile Leu Leu Gly Val Val Ser Cys Val Leu Gly Val Cys Leu Ser Leu  
115 120 125

Gly Pro Trp Thr Val Leu Xaa Ala Ser Gly Cys Ala Phe Trp Ala Gly  
130 135 140

Ser Val Val Ile Ala Ala Gly Ala Gly Ala Ile Val His Glu Lys His  
145 150 155 160

Pro Gly Lys Leu Ala Gly Tyr Ile Ser Ser Leu Leu Thr Leu Xaa Gly  
165 170 175

Phe Ala Thr Ala Met Ala Ala Val Val Leu Cys Val Asn Ser Phe Ile  
180 185 190

Trp Gln Thr Glu Pro Phe Leu Tyr Ile Asp Thr Val Cys Asp Arg Ser  
195 200 205

Asp Pro Val Phe Pro Thr Thr Gly Tyr Arg Trp Met Arg Arg Ser Gln  
210 215 220

Glu Asn Gln Trp Gln Lys Glu Glu Cys Arg Ala Tyr Met Gln Met Leu

## 4993

225                      230                      235                      240  
 Arg Lys Leu Phe Thr Ala Ile Arg Ala Leu Phe Leu Ala Val Cys Val  
                                  245                      250                      255  
 Leu Lys Val Ile Val Ser Leu Val Ser Leu Gly Val Gly Leu Arg Asn  
                                  260                      265                      270  
 Leu Cys Gly Gln Ser Ser Gln Pro Leu Asn Glu Glu Gly Ser Glu Lys  
                                  275                      280                      285  
 Arg Leu Leu Gly Glu Asn Ser Val Pro Pro Ser Pro Ser Arg Glu Gln  
                                  290                      295                      300  
 Thr Ser Thr Ala Ile Val Leu  
 305                      310

&lt;210&gt; 5679

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5679

Ala Gln Trp Leu Pro Leu Glu Glu Arg Gly Ala Glu Thr Glu Thr Lys  
   1                      5                      10                      15  
 Val Gln Glu Arg Glu Asn Gly Glu Ser Pro Leu Glu Leu Glu Gln Leu  
                                  20                      25                      30  
 Asp Gln His His Glu Met Lys Glu Thr Asn Glu Gln Lys Leu His Lys  
                                  35                      40                      45  
 Ile Ala Asn Glu Leu Leu Leu Thr Glu Arg Ala Tyr Val Asn Arg Leu  
                                  50                      55                      60  
 Asp Leu Leu Asp Gln Val Phe Tyr Cys Lys Leu Leu Glu Glu Ala Asn  
   65                      70                      75                      80  
 Arg Gly Ser Phe Xaa Ala Glu Met Val Ile Lys Ser Phe Leu Ile Phe  
                                  85                      90                      95  
 His Gln

4994

&lt;210&gt; 5680

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5680

Ala Arg Lys Glu Ile Gln Tyr Cys Phe Trp Thr Leu Ile Lys Ser Cys  
1 5 10 15

Ala Ile Asp Thr Tyr Met Ser His Leu Ala Val Leu Arg Arg Ala Ile  
20 25 30

Ile Thr Leu Gln Leu Thr Leu Glu Asn Ile Leu Ala Phe Glu His Phe  
35 40 45

Ser Asn Asn Gln Val Asp Ser Arg Gly Ser  
50 55

&lt;210&gt; 5681

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5681

Ser Leu Thr Ser Lys Pro Glu Thr Ser Glu Ile Leu Lys Ala Asn Leu  
1 5 10 15

Phe Ser Leu Leu Cys Ile Lys Phe Ile Tyr Leu Lys Cys Tyr Cys Ser  
20 25 30

Trp Leu Arg Ile Ile Leu Cys Lys Phe Ser Phe Phe Val Val Cys Leu  
35 40 45

Phe Ala Cys Cys Ser Pro  
50

&lt;210&gt; 5682

&lt;211&gt; 486

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids



## 4995

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (326)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (400)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (406)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5682

Ser	Ser	Thr	Ala	Val	Thr	Xaa	Ala	Leu	Glu	Leu	Val	Asp	Pro	Pro	Gly
1				5					10					15	

Cys	Arg	Asn	Ser	Ala	Arg	Gly	Tyr	Ile	Gln	Tyr	Gly	Asn	Glu	Glu	Gln
			20					25					30		

Arg	Lys	Gln	Ala	Phe	Glu	Glu	Leu	Arg	Asp	Asp	Leu	Val	Glu	Leu	Ser
		35					40					45			

Lys	Ala	Lys	Tyr	Ser	Arg	Asn	Ile	Val	Lys	Lys	Phe	Leu	Met	Tyr	Gly
	50					55					60				

Ser	Lys	Pro	Gln	Ile	Ala	Glu	Ile	Ile	Arg	Ser	Phe	Lys	Gly	His	Val
65					70					75					80

Arg	Lys	Met	Leu	Arg	His	Ala	Glu	Ala	Ser	Ala	Ile	Val	Glu	Tyr	Ala
				85					90						95

Tyr	Asn	Asp	Lys	Ala	Ile	Leu	Glu	Gln	Arg	Asn	Met	Leu	Thr	Glu	Glu
			100					105					110		

Leu	Tyr	Gly	Asn	Thr	Phe	Gln	Leu	Tyr	Lys	Ser	Ala	Asp	His	Arg	Thr
		115					120					125			

Leu	Asp	Lys	Val	Leu	Glu	Val	Gln	Pro	Glu	Lys	Leu	Glu	Leu	Ile	Met
	130						135				140				

Asp	Glu	Met	Lys	Gln	Ile	Leu	Thr	Pro	Met	Ala	Gln	Lys	Glu	Ala	Val
145					150					155					160

Ile	Lys	His	Ser	Leu	Val	His	Lys	Val	Phe	Leu	Asp	Phe	Phe	Thr	Tyr
				165					170					175	

Ala	Pro	Pro	Lys	Leu	Arg	Ser	Glu	Met	Ile	Glu	Ala	Ile	Arg	Glu	Ala
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 4996

180	185	190
Val Val Tyr Leu Ala His Thr His Asp Gly Ala Arg Val Ala Met His		
195	200	205
Cys Leu Trp His Gly Thr Pro Lys Asp Arg Lys Val Ile Val Lys Thr		
210	215	220
Met Lys Thr Tyr Val Glu Lys Val Ala Asn Gly Gln Tyr Ser His Leu		
225	230	235
Val Leu Leu Ala Ala Phe Asp Cys Ile Asp Asp Thr Lys Leu Val Lys		
245	250	255
Gln Ile Ile Ile Ser Glu Ile Ile Ser Ser Leu Pro Ser Ile Val Asn		
260	265	270
Asp Lys Tyr Gly Arg Lys Val Leu Leu Tyr Leu Leu Ser Pro Arg Asp		
275	280	285
Pro Ala His Thr Val Arg Glu Ile Ile Glu Val Leu Gln Lys Gly Asp		
290	295	300
Gly Asn Ala His Ser Lys Lys Asp Thr Glu Val Arg Arg Arg Glu Leu		
305	310	315
Leu Glu Ser Ile Ser Xaa Ala Leu Leu Ser Tyr Leu Gln Glu His Ala		
325	330	335
Gln Glu Val Val Leu Asp Lys Ser Ala Cys Val Leu Val Ser Asp Ile		
340	345	350
Leu Gly Ser Ala Thr Gly Asp Val Gln Pro Thr Met Asn Ala Ile Ala		
355	360	365
Ser Leu Ala Ala Thr Gly Leu His Pro Gly Gly Lys Asp Gly Glu Leu		
370	375	380
His Ile Ala Glu His Pro Ala Gly His Leu Val Leu Lys Trp Leu Xaa		
385	390	395
Glu Gln Asp Lys Lys Xaa Lys Glu Asn Gly Arg Glu Gly Cys Phe Ala		
405	410	415
Lys Thr Leu Val Glu His Val Gly Met Lys Asn Leu Lys Ser Trp Ala		
420	425	430
Ser Val Asn Arg Gly Ala Ile Ile Leu Ser Ser Leu Leu Gln Ser Cys		
435	440	445
Asp Leu Glu Val Ala Asn Lys Val Lys Ala Ala Leu Lys Ser Leu Ile		

[illegible]

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<210> 5683
<211> 213
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids
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BNSDOCID: &lt;WO 0122920A2\_1\_&gt;

## 4998

130		135		140
Gly His Gly Asn Pro Gln Ala Phe Ser Tyr Ser Ser Gln Cys Thr Pro				
145		150		155
				160
Leu Cys Leu Lys Ile Lys Gln Leu Gly Val Met Glu Val Gly Pro Cys				
	165		170	175
Ile Tyr Asn Trp Ser Gln Trp Phe Val Glu Gly Gly Trp Gln Asp Gly				
	180		185	190
Asn Leu Gly Gln Met Val Gly Thr Ala Val Asp Lys Arg Arg Glu Ser				
	195		200	205
Gly Leu Leu Gln Phe				
210				

&lt;210&gt; 5684

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (251)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (256)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (257)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5684

Thr His Ala Ser Ala His Thr Thr Asn Pro Glu Gln Thr Leu Pro Gly
1 5 10 15

Thr Asn Leu Thr Gly Phe Leu Ser Pro Val Asp Asn His Met Arg Asn
20 25 30

## 4999

Leu Thr Ser Gln Asp Leu Xaa Tyr Asp Leu Asp Ile Asn Ile Phe Asp  
 35 40 45  
 Glu Ile Asn Leu Met Ser Leu Ala Thr Glu Asp Asn Phe Asp Pro Ile  
 50 55 60  
 Asp Val Ser Gln Leu Phe Asp Glu Pro Asp Ser Asp Ser Gly Leu Ser  
 65 70 75 80  
 Leu Asp Ser Ser His Asn Asn Thr Ser Val Ile Lys Ser Asn Ser Ser  
 85 90 95  
 His Ser Val Cys Asp Glu Gly Ala Ile Gly Tyr Cys Thr Asp His Glu  
 100 105 110  
 Ser Ser Ser His His Asp Leu Glu Gly Ala Val Gly Gly Tyr Tyr Pro  
 115 120 125  
 Glu Pro Ser Lys Leu Cys His Leu Asp Gln Ser Asp Ser Asp Phe His  
 130 135 140  
 Gly Asp Leu Thr Phe Gln His Val Phe His Asn His Thr Tyr His Leu  
 145 150 155 160  
 Gln Pro Thr Ala Pro Glu Ser Thr Ser Glu Pro Phe Pro Trp Pro Gly  
 165 170 175  
 Lys Ser Gln Lys Ile Arg Ser Arg Tyr Leu Glu Asp Thr Asp Arg Asn  
 180 185 190  
 Leu Ser Arg Asp Glu Gln Arg Ala Lys Ala Leu His Ile Pro Phe Ser  
 195 200 205  
 Val Asp Glu Ile Val Gly Met Pro Val Asp Ser Phe Asn Ser Met Leu  
 210 215 220  
 Ser Arg Tyr Tyr Leu Thr Asp Leu Gln Val Ser Leu Ile Arg Asp Ile  
 225 230 235 240  
 Arg Arg Arg Gly Lys Asn Lys Val Ala Ala Xaa Asn Cys Arg Lys Xaa  
 245 250 255  
 Xaa Leu Asp Ile Ile Leu Asn Leu Glu Asp Asp Gly Met Val Thr Trp  
 260 265 270  
 Pro Ala Lys Lys Gly Asn Pro  
 275

&lt;210&gt; 5685

5000

&lt;211&gt; 234

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5685

Lys Asn Leu Thr Glu Asn Gln Glu Ala Leu Ala Lys Glu Met Arg Ala  
 1 5 10 15

Asp Ala Asp Ala Tyr Arg Arg Lys Val Asp Leu Glu Glu His Met Phe  
 20 25 30

His Lys Leu Ile Glu Ala Gly Glu Thr Gln Ser Gln Lys Thr Gln Lys  
 35 40 45

Val Ile Lys Glu Asn Leu Ala Lys Ala Glu Gln Ala Cys Leu Asn Thr  
 50 55 60

Asp Trp Gln Ile Gln Ser Leu His Lys Gln Lys Cys Asp Asp Leu Gln  
 65 70 75 80

Arg Asn Lys Cys Tyr Gln Glu Val Ala Lys Leu Leu Arg Glu Asn Arg  
 85 90 95

Arg Lys Glu Ile Glu Ile Ile Asn Ala Met Val Glu Glu Glu Ala Lys  
 100 105 110

Lys Trp Lys Glu Ala Glu Gly Lys Glu Phe Arg Leu Arg Ser Ala Lys  
 115 120 125

Lys Ala Ser Ala Leu Ser Asp Ala Ser Arg Lys Trp Phe Leu Lys Gln  
 130 135 140

Glu Ile Asn Ala Ala Val Glu His Ala Glu Asn Pro Cys His Lys Glu  
 145 150 155 160

Glu Pro Arg Phe Gln Asn Glu Gln Asp Ser Ser Cys Leu Pro Arg Thr  
 165 170 175

Ser Gln Leu Asn Asp Ser Ser Glu Met Asp Pro Ser Thr Gln Ile Ser  
 180 185 190

Leu Asn Arg Arg Ala Val Glu Trp Asp Thr Thr Gly Gln Asn Leu Ile  
 195 200 205

Lys Lys Val Arg Asn Leu Arg Gln Arg Leu Thr Ala Arg Ala Arg His  
 210 215 220

Arg Cys Gln Thr Pro His Leu Leu Ala Ala  
 225 230

## 5001

&lt;210&gt; 5686

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (66)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5686

Glu	Ile	Lys	Phe	Cys	Phe	Tyr	Leu	Gly	Thr	Arg	Ala	Leu	Gln	Asp	Leu
1				5					10					15	

Ile	Pro	Ala	Tyr	Leu	Ser	Ser	Leu	Asp	Ser	Leu	Tyr	Ser	Ser	Ile	Trp
			20					25					30		

Lys	Cys	Gly	Pro	Trp	Thr	Glu	Ala	Leu	Pro	Asn	Asn	Ala	Glu	His	Leu
		35					40					45			

Val	Leu	Pro	Phe	Ala	Arg	Met	Val	Leu	Met	Val	Pro	Lys	Ile	Thr	Ala
	50					55					60				

Ser	Xaa	Pro	Lys	Phe	Arg	Thr	Gln	Ile	Thr	Leu	Trp	Arg	Arg	Pro	Gln
65					70					75					80

Pro	Leu	Ala	Xaa	Ala	Phe	Lys	Ala	Leu	Arg	Asp	Leu	Asp	Thr	Arg	Leu
				85					90					95	

Ala	Leu	Ile	Tyr	Ile	Tyr	Phe	Lys	Ser	Ile	Ser	Ser	Leu	Ser	His	Ala
		100						105					110		

His

&lt;210&gt; 5687

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5687

Leu	Asp	Ile	Lys	Thr	Ser	Tyr	Ser	Leu	Asn	Pro	Lys	Ala	Lys	Leu	Met
1					5					10				15	

## 5002

Ser Arg Ala Asn Gln Ser Ser Trp Gly Gln Asn Arg Thr Lys Thr Tyr  
20 25 30  
Leu Met Gln Gly Ile Glu Ala Arg Pro Lys Thr Gly Gln Pro Asn Arg  
35 40 45  
Met Gly His Leu Pro Pro Leu Met Pro Ala Cys Pro Ser Val Ile Ile  
50 55 60  
Asn Ser Ala Pro Phe His Ser Pro Lys Ser Pro Val Gln Thr  
65 70 75

&lt;210&gt; 5688

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (11)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5688

Leu Ser Leu Thr Lys Gly Asn Lys Ser Xaa Xaa Ser Thr Ala Val Ala  
1 5 10 15

Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg  
20 25 30

Ala Ser Asn Leu Tyr Phe Tyr Leu Leu Cys Ile  
35 40

&lt;210&gt; 5689

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5689

Thr Thr Tyr Cys Phe Pro Leu Phe Gln Gly Asp Ala Val Asp Tyr Gln  
1 5 10 15



## 5003

Lys Gln Leu Lys Gln Met Ile Lys Asp Leu Ala Lys Glu Lys Asp Lys  
20 25 30

Thr Glu Lys Glu Leu Pro Lys Met Ser Gln Val Trp Thr Phe Phe Ser  
35 40 45

Ala Glu Asn  
50

<210> 5690

<211> 35

<212> PRT

<213> Homo sapiens

<400> 5690

Glu Ala Leu Val Asp Phe Leu Tyr Trp Tyr Phe Arg Ser Leu Leu Ser  
1 5 10 15

Phe Leu Thr Glu Val Gly Ala Asn Glu Leu Ser Ile Leu Ser Thr Trp  
20 25 30

Leu Ile Lys  
35

<210> 5691

<211> 32

<212> PRT

<213> Homo sapiens

<400> 5691

Gly Asn Lys Ser Trp Gly Ser Thr Ala Val Thr Thr Ala Leu Glu Leu  
1 5 10 15

Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Ala Tyr Lys Leu Ser  
20 25 30

<210> 5692

<211> 74

<212> PRT

<213> Homo sapiens

<400> 5692

## 5004

Gly Thr Leu Leu Lys Phe Leu Cys Lys Leu Gly Leu Phe Phe Ser Leu  
 1 5 10 15  
 Ser Cys Val Ser Arg Thr Val Gly Val Pro Gly Leu Leu Ser Cys Trp  
 20 25 30  
 Val Gln Ala Ser Arg Ile Leu Arg Arg Cys Glu Glu Glu Val Arg Lys  
 35 40 45  
 Ile Gly Gly Asn Arg Lys Glu Lys Glu Ile Trp Pro Arg Phe Trp Gly  
 50 55 60  
 Glu Lys Val Trp Gly Lys Ser Lys Gly Asn  
 65 70

<210> 5693  
 <211> 50  
 <212> PRT  
 <213> Homo sapiens

<400> 5693  
 Glu Asn Ala Cys Lys Ala Leu Gly Ile Val His Asp Val Asn Thr Gln  
 1 5 10 15  
 Met Leu Leu Lys Ser Ile Asn Val Asn Tyr Phe Leu Ala His Phe Ser  
 20 25 30  
 Gly Leu Ile Ser Pro Val Lys Met Ile His Ser Ile Leu Phe Asn Gly  
 35 40 45  
 Phe Met  
 50

<210> 5694  
 <211> 147  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (35)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
 <220>  
 <221> SITE  
 <222> (92)  
 <223> Xaa equals any of the naturally occurring L-amino acids

## 5005

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (134)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (140)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5694

Gly	Leu	Gly	Cys	Ala	Leu	Ala	Gln	Val	Leu	Cys	Gly	Asp	Ala	Arg	Gln
1				5					10					15	

His	Ile	Leu	Leu	Arg	Asp	Asp	Thr	Leu	Ser	Gly	Gln	His	Arg	Pro	Val
			20					25					30		

Thr	Ile	Xaa	Ser	Leu	Ala	Thr	Ser	Leu	Ser	Pro	Ala	Ser	Pro	Ser	Leu
		35					40					45			

Asp	Thr	Arg	Pro	Gln	Thr	Pro	Gly	Ser	Gly	Arg	Gly	Gly	Trp	Thr	Ser
	50					55					60				

Leu	His	Thr	Pro	Ala	Gly	Arg	Gly	Gln	Val	Pro	Arg	Ser	Pro	Met	Trp
65					70					75					80

Arg	Ala	Gly	Pro	Gly	Ala	Ala	Gln	Ala	Gly	Gly	Xaa	Asn	Trp	Gly	Leu
				85					90					95	

Arg	Val	Leu	Arg	Arg	Arg	Val	Lys	Ile	Ile	Lys	Gly	Ala	Thr	Glu	Ser
		100					105						110		

Lys	Arg	Arg	Glu	Gly	Leu	Val	Pro	Asn	Ser	Cys	Ser	Pro	Gly	Asp	Pro
	115						120					125			

Leu	Val	Leu	Glu	Arg	Xaa	Pro	Pro	Arg	Trp	Ser	Xaa	Ser	Phe	Val	Pro
	130					135					140				

Leu	Val	Arg
145		

&lt;210&gt; 5695

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5695

Val	Phe	Ser	Gly	Met	His	Arg	Phe	Ile	Ile	Phe	Ser	Thr	Leu	Lys	Met
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5006

1	5	10	15
Arg Ala Phe Lys Ser Val His Tyr Leu Tyr Ser Pro Val Leu Ser Ile			
20	25	30	
Val Tyr Ile Ile Tyr Met Ile Lys Glu Asn Met His Asn Gln Thr Ser			
35	40	45	
Leu Asn Ile Val Phe Ala Pro Asp Glu Gln			
50	55		

&lt;210&gt; 5696

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5696

Thr Arg Cys Lys Arg Phe Val Asn Ser Leu Ala Pro Lys Leu Ser His			
1	5	10	15
Trp Arg Arg Asp Phe Xaa His Tyr Ala Glu Ser Gly Trp Val Glu Phe			
20	25	30	
Arg Thr Ala Thr Leu Val Ala Glu Glu Leu His Gln Leu Gly Tyr Ser			
35	40	45	
Leu Ala Leu Gly Arg Glu			
50			

&lt;210&gt; 5697

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5697

Gln Gln Phe Gly Arg Asp Gly Ser Pro Ala Ala Tyr Val Gly Gly Pro			
1	5	10	15
Ser Val Gly Leu Arg Val Arg Val Ala Met Ala Val Asp Ile Thr Leu			
20	25	30	
Leu Phe Arg Ala Ser Val Lys Thr Val Lys Thr Arg Asn Lys Arg Trp			

## 5007

35                                      40                                      45  
 Glu Trp Arg Trp Ala Thr Gly Ser Met  
     50                                      55  
  
 <210> 5698  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (17)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 5698  
 Gln Lys Ser Pro Ser Val Glu Asp Gly Leu Lys Gly Arg Asp Gln Thr  
     1                                      5                                      10                                      15  
  
 Xaa Met Asp Thr Asn Pro Lys Thr Glu Asp Ala Pro Cys Leu Pro His  
                     20                                      25                                      30  
  
 Glu Ala Tyr Leu Ser Ala Cys Val Ser Met Ile Ala Gly Ile Glu Leu  
                     35                                      40                                      45  
  
 Leu Gly Thr Ser Arg Met Ile Tyr Leu Ala Ile Cys Phe Leu His Ser  
     50                                      55                                      60  
  
 Lys Asn Gln Asn Gly Pro Val Ile Pro Asn Arg Glu Asn Arg Ala Asn  
     65                                      70                                      75                                      80  
  
 Ser Leu Phe Ser Pro Leu Pro Ser Glu Ala Ser Phe  
                     85                                      90

<210> 5699  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (108)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5699  
 Gly Arg Gly Trp Gly Trp Glu Gly Thr Val Leu Pro Gly Glu Ala Glu  
     1                                      5                                      10                                      15

## 5008

Glu Asp Arg Val Gly Leu Arg Ala Arg Arg Arg Pro Ser Arg Leu Leu  
                   20                  25                  30  
 Ala Pro Leu Ala Trp Cys Pro Ala Pro Gly Arg Glu Ala Ala Gly Leu  
                   35                  40                  45  
 Asp Arg Ala Gly Leu Pro Gly Gly Ala Arg Ala Leu Ala Ala Gly Arg  
                   50                  55                  60  
 Pro Leu Leu Ser Ala Met Ala Gly Leu His Pro Trp Val Ile Phe Ser  
                   65                  70                  75                  80  
 Gly Pro Leu Trp Pro Leu Leu Thr Pro Arg Glu Gln Thr Thr Arg Thr  
                   85                  90                  95  
 Thr Gln Glu Gln Ile Lys Ser Arg Pro Gln Pro Xaa Arg Glu Arg Ala  
                   100                  105                  110  
 Ser Ile Leu Phe Ala Pro Arg Val Ala Val  
                   115                  120

&lt;210&gt; 5700

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5700

Ala Glu Leu Thr Pro Ser Ser Lys Leu Thr Val Asp Thr Asp Thr Leu  
                   1                  5                  10                  15  
 Thr Pro Ser Ser Thr Leu Cys Glu Asn Ser Val Ser Glu Leu Leu Thr  
                   20                  25                  30  
 Pro Ala Lys Ala Glu Xaa Ser Xaa His Pro Asn Ser Asp Phe Phe Gly  
                   35                  40                  45  
 Gln Glu Gly Glu Thr Gln Phe Gly Phe Pro Asn Ala Ala Gly Asn His  
                   50                  55                  60

## 5009

Gly Ser Gln Lys Glu Arg Asn Leu Ile Thr Val Thr Gly Ser Ser Phe  
 65 70 75 80

Leu Val

<210> 5701  
 <211> 316  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (14)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (25)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5701  
 Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Thr Gly Xaa Asn Asn  
 1 5 10 15

Thr Lys Ala Phe Glu Val Pro Ala Xaa Ala Asn Phe Leu Asn Ser Asn  
 20 25 30

Asp Val Phe Val Leu Lys Thr Gln Ser Cys Cys Tyr Leu Trp Cys Gly  
 35 40 45

Lys Gly Cys Ser Gly Asp Glu Arg Glu Met Ala Lys Met Val Ala Asp  
 50 55 60

Thr Ile Ser Arg Thr Glu Lys Gln Val Val Val Glu Gly Gln Glu Pro  
 65 70 75 80

Ala Asn Phe Trp Met Ala Leu Gly Gly Lys Ala Pro Tyr Ala Asn Thr  
 85 90 95

Lys Arg Leu Gln Glu Glu Asn Leu Val Ile Thr Pro Arg Leu Phe Glu  
 100 105 110

Cys Ser Asn Lys Thr Gly Arg Phe Leu Ala Thr Glu Ile Pro Asp Phe  
 115 120 125

Asn Gln Asp Asp Leu Glu Glu Asp Asp Val Phe Leu Leu Asp Val Trp  
 130 135 140

## 5010

Asp Gln Val Phe Phe Trp Ile Gly Lys His Ala Asn Glu Glu Glu Lys  
 145 150 155 160

Lys Ala Ala Ala Thr Thr Ala Gln Glu Tyr Leu Lys Thr His Pro Ser  
 165 170 175

Gly Arg Asp Pro Glu Thr Pro Ile Ile Val Val Lys Gln Gly His Glu  
 180 185 190

Pro Pro Thr Phe Thr Gly Trp Phe Leu Ala Trp Asp Pro Phe Lys Trp  
 195 200 205

Ser Asn Thr Lys Ser Tyr Glu Asp Leu Lys Ala Glu Leu Gly Asn Ser  
 210 215 220

Arg Asp Trp Ser Gln Ile Thr Ala Glu Val Thr Ser Pro Lys Val Asp  
 225 230 235 240

Val Phe Asn Ala Asn Ser Asn Leu Ser Ser Gly Pro Leu Pro Ile Phe  
 245 250 255

Pro Leu Glu Gln Leu Val Asn Lys Pro Val Glu Glu Leu Pro Glu Gly  
 260 265 270

Val Asp Pro Ser Arg Lys Glu Glu His Leu Ser Ile Glu Asp Phe Thr  
 275 280 285

Gln Ala Phe Gly Met Thr Pro Ala Ala Phe Ser Ala Leu Pro Arg Trp  
 290 295 300

Lys Gln Gln Asn Leu Lys Lys Glu Lys Gly Leu Phe  
 305 310 315

<210> 5702

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (58)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (84)

<223> Xaa equals any of the naturally occurring L-amino acids



## 5011

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5702

Gly Lys Lys Glu Glu Asn Asn Pro Val Ser Leu Glu Val Gly Val Trp  
 1 5 10 15

Val Gly Thr Gly Asp Pro Gly Val Val Met Met Lys Thr Arg Ala Gly  
 20 25 30

Phe Gly Gly Arg Leu Arg Leu Phe Arg Ser Leu Leu Ser Pro Pro Pro  
 35 40 45

Ser Arg Ser Leu Pro Pro Pro Pro His Xaa Ser Ala Gly Lys Ala Ala  
 50 55 60

Cys Ala Ala Pro Gly Gly Glu Met Val Asp Ala His Glu Leu Cys Met  
 65 70 75 80

Trp Phe Leu Xaa Xaa Leu Ser Val Leu Gly Pro Val Phe Gly Gly Thr  
 85 90 95

Pro Lys Gly

&lt;210&gt; 5703

&lt;211&gt; 292

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5703

Leu Gln Ala Ile Pro Ala Lys Lys Ala Pro Leu Gln Leu Leu Ser Arg  
 1 5 10 15

Leu Cys Gly Asp His Leu Gln Ala Ile Pro Ala Lys Lys Ala Pro Ala  
 20 25 30

Gly Gln Glu Glu Pro Gly Thr Pro Pro Ser Ser Pro Leu Ser Ala Glu  
 35 40 45

Gln Leu Asp Arg Ile Gln Arg Asn Lys Ala Ala Ala Leu Leu Arg Leu  
 50 55 60

Ala Ala Arg Asn Val Pro Val Gly Phe Gly Glu Ser Trp Lys Lys His  
 65 70 75 80

Leu Ser Gly Glu Phe Gly Lys Pro Tyr Phe Ile Lys Leu Met Gly Phe

## 5012

85										90					95				
Val	Ala	Glu	Glu	Arg	Lys	His	Tyr	Thr	Val	Tyr	Pro	Pro	Pro	His	Gln				
			100						105					110					
Val	Phe	Thr	Trp	Thr	Gln	Met	Cys	Asp	Ile	Lys	Asp	Val	Lys	Val	Val				
		115					120					125							
Ile	Leu	Gly	Gln	Asp	Pro	Tyr	His	Gly	Pro	Asn	Gln	Ala	His	Gly	Leu				
	130					135					140								
Cys	Phe	Ser	Val	Gln	Arg	Pro	Val	Pro	Pro	Pro	Pro	Ser	Leu	Glu	Asn				
145					150				155					160					
Ile	Tyr	Lys	Glu	Leu	Ser	Thr	Asp	Ile	Glu	Asp	Phe	Val	His	Pro	Gly				
			165					170					175						
His	Gly	Asp	Leu	Ser	Gly	Trp	Ala	Lys	Gln	Gly	Val	Leu	Leu	Leu	Asn				
		180					185					190							
Ala	Val	Leu	Thr	Val	Arg	Ala	His	Gln	Ala	Asn	Ser	His	Lys	Glu	Arg				
	195					200					205								
Gly	Trp	Glu	Gln	Phe	Thr	Asp	Ala	Val	Val	Ser	Trp	Leu	Asn	Gln	Asn				
	210					215					220								
Ser	Asn	Gly	Leu	Val	Phe	Leu	Leu	Trp	Gly	Ser	Tyr	Ala	Gln	Lys	Lys				
225				230					235					240					
Gly	Ser	Ala	Ile	Asp	Arg	Lys	Arg	His	His	Val	Leu	Gln	Thr	Ala	His				
			245					250				255							
Pro	Ser	Pro	Leu	Ser	Val	Tyr	Arg	Gly	Phe	Phe	Gly	Cys	Arg	His	Phe				
		260					265					270							
Ser	Lys	Thr	Asn	Glu	Leu	Leu	Gln	Lys	Ser	Gly	Lys	Lys	Pro	Ile	Asp				
	275					280					285								
Trp	Lys	Glu	Leu																
	290																		

&lt;210&gt; 5704

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5704

Phe	Leu	Arg	Cys	Val	Asp	Leu	Asp	Gly	Arg	Cys	Asp	Met	Leu	Val	Phe
1				5					10					15	

## 5013

Leu Thr Cys Ile Tyr Leu Arg His Cys Tyr Arg Asp Thr Val Val Thr  
                   20                  25                  30  
 Phe Trp Gly Thr Val Phe Gly Glu Arg Gly Val His Leu Asp Leu Cys  
           35                  40                  45  
 Gly Thr Val Gln Ile Val Met Trp Leu His Arg Lys Pro Cys Ala Lys  
           50                  55                  60  
 Asn Lys Leu His Leu Lys Asn Ile Lys Asn Leu Arg Phe Met Cys Phe  
   65                  70                  75                  80  
 Leu Ser Phe Ser Leu Arg Lys Gln Lys Ser Ser Gly Leu Arg Tyr Leu  
                   85                  90                  95  
 Thr Leu His Val Lys Thr Leu  
           100

&lt;210&gt; 5705

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (131)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (146)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (154)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (157)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5705

Ala Ser Met Ala Thr Ala Ala Thr Glu Glu Pro Phe Pro Phe His Gly  
   1                  5                  10                  15

Leu Leu Pro Lys Lys Glu Thr Gly Ala Ala Ser Phe Leu Cys Arg Tyr

## 5014

20 25 30  
 Pro Glu Tyr Asp Gly Arg Gly Val Leu Ile Ala Val Leu Asp Thr Gly  
 35 40 45  
 Val Asp Pro Gly Ala Pro Gly Met Gln Val Thr Thr Asp Gly Lys Pro  
 50 55 60  
 Lys Ile Val Asp Ile Ile Asp Thr Thr Gly Ser Gly Asp Val Asn Thr  
 65 70 75 80  
 Ala Thr Glu Val Glu Pro Lys Asp Gly Glu Ile Val Gly Leu Ser Gly  
 85 90 95  
 Arg Val Leu Lys Ile Pro Ala Ser Trp Thr Asn Pro Ser Gly Lys Tyr  
 100 105 110  
 His Ile Gly Ile Lys Asn Gly Tyr Asp Phe Tyr Pro Lys Ala Leu Lys  
 115 120 125  
 Glu Arg Xaa Gln Lys Glu Arg Lys Glu Lys Ile Trp Asp Pro Val His  
 130 135 140  
 Arg Xaa Ala Leu Ala Glu Ala Cys Arg Xaa Gln Glu Xaa Phe Asp Val  
 145 150 155 160  
 Ala Asn Asn Gly Ser Ser Gln Ala Asn Lys Leu Ile Lys  
 165 170

&lt;210&gt; 5706

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5706

Thr Leu Val Ala Glu Ala Thr Met Asp Leu Leu Leu Gly Asp Ser Trp  
 1 5 10 15  
 Gly Ser Pro Arg Pro Pro Arg Ala Glu Arg Gly Asp Glu Glu Phe Gly  
 20 25 30  
 Thr Val Gly Glu Glu Met Gly Arg Asp Gly Ile Ser Gly Ser Gln Ser  
 35 40 45  
 Gly Trp Asp Thr His Ala Gln Leu Leu His Trp Trp Gly Val Gly His  
 50 55 60  
 Thr Leu Phe Leu Thr Gly His Asp Leu Gln Glu Glu Lys  
 65 70 75

## 5015

&lt;210&gt; 5707

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5707

Ile Gln His Leu Met Gln Val Ser Ser Trp Val Val Phe Gln Leu Val  
1 5 10 15

Trp Asn Ser Leu Val Leu Thr Gln Thr Gly Ile Lys His Tyr Phe Arg  
20 25 30

Phe Ser Leu Cys Gln Phe Leu Ser Ser Tyr Asn His Val Asn Gln Asp  
35 40 45

Val Arg Thr Ser Ile  
50

&lt;210&gt; 5708

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5708

Gln Pro Gln Cys Pro Ala Ser Leu Thr Ser Ser Phe Leu Cys Pro Leu  
1 5 10 15

Cys Gly Ser Leu Leu Leu Val Ser Ala Phe Ser Met Leu Arg Thr Lys  
20 25 30

Ser Pro Ile His Cys Leu Cys Ser Arg Lys Leu Gln Lys Asn Lys Glu  
35 40 45

Pro Asn Tyr Gln Asn His Ile Lys Ser Pro Leu Phe Cys Leu Gly Ile  
50 55 60

&lt;210&gt; 5709

&lt;211&gt; 39

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

## 5016

&lt;400&gt; 5709

Ala Ala Phe Phe Leu Leu Arg Leu Ser Leu Phe Val Leu Leu Pro Lys  
1 5 10 15

Arg Gln Leu Pro Glu Phe Gly Cys Leu Asn Tyr Asn Leu Cys Arg Asn  
20 25 30

Ser Ser Val Asn Thr Phe Lys  
35

&lt;210&gt; 5710

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5710

Gln Leu Gln Leu Phe Cys Leu Gly Phe Gln Leu Phe Leu Val Arg Val  
1 5 10 15

Cys Ser Leu Met Ile Trp Ile Tyr Phe Ala Phe Ile Phe Gln Arg Leu  
20 25 30

His Leu Ile Pro Gly Lys Ser Ser Ala Arg Gln Val Ser Gly Phe Ser  
35 40 45

Leu Leu Ser Phe Asn Pro Ser Asn Thr Ile Phe Val Lys Leu Asp Trp  
50 55 60

Trp Cys Phe Ile Gln Leu Ile Tyr Ser Ala Tyr Leu Phe Glu Lys Arg  
65 70 75 80

Leu Leu Glu Ile Asp Asp Val Phe Val Pro Val Ile Leu Lys Val Val  
85 90 95

Gly Ala Arg Ile Glu Phe His Ser Gly Ile Gly Phe Gly Ser Gly Leu  
100 105 110

&lt;210&gt; 5711

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5711

Trp Val Met Glu Tyr Asn Leu Glu Lys Lys Arg Asn Lys Arg Asp Cys

## 5017

1		5		10		15									
Val	Ser	Pro	Cys	Cys	Pro	Gly	Trp	Ser	Arg	Thr	Ser	Glu	Leu	Lys	Gln
		20				25						30			
Ser	Thr	Leu	Leu	Ser	Leu	Gln	Lys	Cys	Trp	Asp	Tyr	Arg	His	Glu	Thr
	35					40						45			
Pro	Ser	Pro	Ala	Ile	Arg	Phe	Leu	Phe	Tyr	Ile	Tyr	Met	Lys		
	50					55					60				

&lt;210&gt; 5712

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (101)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (113)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (173)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (192)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5712

Pro	Met	Arg	Arg	Pro	Arg	Gly	Glu	Pro	Gly	Pro	Arg	Ala	Pro	Arg	Pro
1				5					10					15	
Thr	Glu	Gly	Ala	Thr	Cys	Ala	Gly	Pro	Gly	Glu	Ser	Trp	Ser	Pro	Ser
		20					25					30			
Pro	Asn	Ser	Met	Leu	Arg	Val	Leu	Leu	Ser	Ala	Gln	Thr	Ser	Pro	Ala
		35					40					45			
Arg	Leu	Ser	Gly	Leu	Leu	Leu	Ile	Pro	Pro	Val	Gln	Pro	Cys	Cys	Leu
	50					55					60				

## 5018

Gly Pro Ser Lys Trp Gly Asp Arg Pro Val Gly Gly Gly Pro Ser Ala  
 65 70 75 80

Gly Pro Val Gln Gly Leu Gln Arg Leu Leu Glu Gln Ala Lys Ser Pro  
 85 90 95

Gly Glu Leu Leu Xaa Trp Leu Gly Gln Asn Pro Ser Lys Val Arg Ala  
 100 105 110

Xaa His Tyr Ser Val Ala Leu Arg Arg Leu Gly Gln Leu Leu Gly Ser  
 115 120 125

Arg Pro Arg Pro Pro Pro Val Glu Gln Val Thr Leu Gln Asp Leu Ser  
 130 135 140

Gln Leu Ile Ile Arg Asn Cys Pro Ser Phe Asp Ile His Thr Ile His  
 145 150 155 160

Val Cys Leu His Leu Ala Val Leu Leu Gly Phe Pro Xaa Asp Gly Pro  
 165 170 175

Leu Val Cys Ala Leu Glu Gln Glu Pro Lys Leu Arg Leu Leu Arg Xaa  
 180 185 190

His Leu

<210> 5713

<211> 275

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5713

Arg Trp Ala Thr Tyr Gly Arg Thr Gly Gly Leu Pro Asn Val Gly Lys



## 5019

1	5	10	15
Ser Ser Thr Ile Asn Xaa Ile Met Gly Asn Lys Lys Val Ser Val Ser	20	25	30
Ala Thr Pro Gly His Thr Lys His Phe Gln Thr Leu Tyr Val Xaa Pro	35	40	45
Gly Leu Cys Leu Cys Asp Cys Pro Gly Leu Val Met Pro Ser Phe Val	50	55	60
Ser Thr Lys Ala Glu Met Thr Cys Ser Gly Ile Leu Pro Ile Asp Gln	65	70	75
Met Arg Asp His Val Pro Pro Val Ser Leu Val Cys Gln Asn Ile Pro	85	90	95
Arg His Val Leu Xaa Ala Thr Tyr Gly Ile Asn Ile Ile Thr Pro Arg	100	105	110
Glu Asp Glu Asp Pro His Arg Pro Pro Thr Ser Glu Glu Leu Leu Thr	115	120	125
Ala Tyr Gly Tyr Met Arg Gly Phe Met Thr Ala His Gly Gln Pro Asp	130	135	140
Gln Pro Arg Ser Ala Arg Tyr Ile Leu Lys Asp Tyr Val Ser Gly Lys	145	150	155
Leu Leu Tyr Cys His Pro Pro Pro Gly Arg Asp Pro Val Thr Phe Gln	165	170	175
His Gln His Gln Arg Leu Leu Glu Asn Lys Met Asn Ser Asp Glu Ile	180	185	190
Lys Met Gln Leu Gly Arg Asn Lys Lys Ala Lys Gln Ile Glu Asn Ile	195	200	205
Val Asp Lys Thr Phe Phe His Gln Glu Asn Val Arg Ala Leu Thr Lys	210	215	220
Gly Val Gln Ala Val Met Gly Tyr Lys Pro Gly Ser Gly Val Val Thr	225	230	235
Ala Ser Thr Ala Ser Ser Glu Asn Gly Ala Gly Lys Pro Trp Lys Lys	245	250	255
His Gly Asn Arg Asn Lys Lys Glu Lys Ser Arg Arg Leu Tyr Lys His	260	265	270
Leu Asp Met			

5020

275

&lt;210&gt; 5714

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5714

His Glu Leu Glu His Thr Leu Val Met Ala Gly Pro Asn Ser Lys Arg  
1 5 10 15

Gln Thr Gln Gly Val His Val Pro Arg Met Leu Gln Pro Ala Leu Gly  
20 25 30

Pro Arg Val Ser His Glu Asp Trp Pro Pro Leu Cys Thr Gly Ala Arg  
35 40 45

Gly Gly Gln Val Pro Val Leu Ala Arg Leu Leu Ala Ala Val Pro Thr  
50 55 60

Glu Thr Thr Ala Leu Leu Cys Phe Pro Arg Arg Gly Ala Trp Leu Leu  
65 70 75 80

Ala Val Arg Ala Gly Leu Phe Gln Lys Val Gly Pro Cys Pro  
85 90

&lt;210&gt; 5715

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5715

Gly Gln Val Ala Ala Leu Ser Pro Arg Val Val Pro Gly Arg Leu Arg  
1 5 10 15

Ser Ser Pro Lys Arg Gly Cys Ser Ser Gly Lys Gln Val Asn Ser Trp  
20 25 30

Tyr Phe Thr Phe Leu Gly Asn Thr Xaa Asn Glu Asp Leu Gln Leu  
35 40 45

## 5021

&lt;210&gt; 5716

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5716

Pro Lys Thr Val Ser Lys Met His Ile Lys Ser Ile Ile Leu Glu Gly  
1 5 10 15

Phe Lys Ser Tyr Ala Gln Arg Thr Glu Val Asn Gly Phe Asp Pro Leu  
20 25 30

Phe Asn Ala Ile Thr Gly Leu Asn Gly Ser Gly Lys Ser Asn Ile Leu  
35 40 45

Asp Ser Ile Cys Phe Leu Leu Gly Ile Ser Asn Leu Ser Gln Val Arg  
50 55 60

Ala Ser Lys Phe Thr Arg Phe  
65 70

&lt;210&gt; 5717

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5717

Pro Thr Tyr Gly Cys Trp Asp Asn Ser Pro Ser Arg Met Tyr Cys Cys  
1 5 10 15

Ser Ala Gln Asp Ser Lys Met Asp Tyr Lys Arg Arg Phe Leu Leu Gly  
20 25 30

Gly Ser Lys Gln Lys Val Gln Gln His Ser Asn Thr Arg Cys Leu Ser  
35 40 45

Trp Ala Glu His  
50

&lt;210&gt; 5718

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

## 5022

&lt;222&gt; (53)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5718

Phe Gly Thr Lys Glu Thr Val Asn Lys Asp Ile Cys Glu Lys Gly Thr  
 1 5 10 15

Ile Gln Gln Met Ile Gly Ile Phe Lys Asn Ile Ile Ser Lys Pro Asn  
 20 25 30

Glu Lys Glu Glu Ala Ile Val Leu Glu Ile Gln Ser Asp Ile Leu Leu  
 35 40 45

Ile Leu Ser Gly Xaa Cys Glu Asn His Ile Gln Arg Lys Glu Ile Phe  
 50 55 60

Gly Thr Glu Gly Val Asp Ile Val Leu His Val Met Lys Thr Asp Pro  
 65 70 75 80

Arg Lys Leu Gln Ser Gly Leu Gly Tyr Asn Val Leu Leu Phe Ser Thr  
 85 90 95

Leu Asp Ser Ile Trp Cys Cys Ile Leu Gly Cys Tyr Pro Ser Glu Asp  
 100 105 110

Tyr Phe Leu Glu Lys Glu Gly Ile Phe Leu Leu Leu Asp Leu Leu Ala  
 115 120 125

Leu Asn Gln Lys Asn Ser Val Ile  
 130 135

&lt;210&gt; 5719

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5719

Lys Ser Leu Gly Glu Lys Lys Ser His Thr Val Phe Leu Ala Ile Arg  
 1 5 10 15

Ile Met Lys Thr Asn Phe Gly Glu Cys Glu Gln Leu Arg Gln Thr Gly  
 20 25 30

His Arg Leu Gln Gly Leu Thr Ser Leu Thr Val Thr Asp Asn Leu Gly  
 35 40 45

Met Asp Pro Thr Ala Asp Val Ser Lys Gly His Arg Gly Glu Leu Val  
 50 55 60

## 5023

Thr Ser Asn

65

&lt;210&gt; 5720

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5720

Leu Ile Arg Xaa Gln Ser Trp Ser Ser Thr Ala Val Ala Ala Ala Leu

1

5

10

15

Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Gly Leu Leu

20

25

30

Gln Lys Gly Tyr Ile Ile Leu Ser Leu Val Ile Gln Arg Tyr Ser

35

40

45

&lt;210&gt; 5721

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (26)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5721

Val Leu Leu Asn Trp Ile Ile Gln Tyr Tyr Gly Tyr Asn Val Ile Gln

1

5

10

15

Tyr Tyr Gly Gly Ile Cys Val Ile Ile Xaa Ile Asn Asn Thr Gly Glu

20

25

30

Ile Ser Gly Arg Gln Lys Ser Glu Met Ala Leu Thr Glu Phe Lys Ser

35

40

45

Arg Cys Trp Glu Gly Ser Thr Pro Leu Gly Gly Cys Gly Gly Gly Ser

50

55

60

Ile Ser Leu Pro Ser Pro Thr Tyr Gly Leu Cys Ile Pro Trp Leu Val

## 5024

65		70		75		80									
Ala	Pro	Ser	Ser	Ile	Phe	Lys	Ala	Ser	Ser	Val	Val	Leu	Pro	Ile	Ser
				85					90					95	
Leu	Ile	Phe	Leu												
			100												

<210> 5722  
 <211> 63  
 <212> PRT  
 <213> Homo sapiens

<400> 5722  
 Ala Arg Ala Glu Ile Gly Phe Leu Glu Gly Ser Ser Gly Lys Trp Pro  
 1 5 10 15  
 Asp Ser Ile Leu Arg Leu Cys Met Thr Ser Arg Tyr Tyr Pro Val Gly  
 20 25 30  
 Val Pro Trp Gly Ala Met Ala Ala Ile Arg Cys Arg Leu Gly Tyr Ile  
 35 40 45  
 Lys Trp Ala Glu Gly Thr Cys Leu Gly Arg Trp Gly Gly Leu Gln  
 50 55 60

<210> 5723  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (5)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5723  
 Phe Met Ile Leu Xaa Tyr Lys Ser Tyr Glu Phe Leu Glu Leu Gln Lys  
 1 5 10 15  
 Trp Pro Gly Val Val Ala His Thr Val Asn Pro Gly Thr Leu Gly Gly  
 20 25 30  
 Gln Gly Arg Arg Thr Thr  
 35

## 5025

&lt;210&gt; 5724

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (37)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (89)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5724

Asp	Glu	Glu	Val	Tyr	Ile	Trp	Val	Ser	Phe	Leu	His	Pro	Val	Glu	Ser
1					5				10					15	

Ser	Arg	Lys	Ser	Gly	Pro	Ile	Leu	Ser	Cys	Ser	Phe	Thr	Glu	Lys	Leu
			20					25					30		

Leu	Ser	Pro	Phe	Xaa	Phe	Leu	Leu	Asn	Glu	Leu	Trp	Ser	Pro	Asp	Leu
		35				40						45			

Leu	Cys	Lys	Gly	Gln	Pro	Asp	Pro	Pro	Phe	Met	His	Ser	Pro	Ser	Glu
	50					55					60				

Ser	Leu	Leu	Val	Ala	Trp	Leu	Glu	Xaa	Ser	Gly	Ile	Phe	Glu	Phe	Trp
65					70					75					80

Pro	Leu	Gln	Leu	Ser	Trp	Gly	Pro	Xaa	Gly	Gly	Leu	Pro	Pro	Leu	
				85					90					95	

&lt;210&gt; 5725

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5725

His	Glu	Gly	Val	Ser	Thr	Ala	Pro	Ser	Gln	Lys	Phe	Tyr	Ile	Phe	Tyr
1				5					10					15	

## 5026

Arg Gly Lys Lys Thr Leu Tyr Thr Met Ala Arg Pro Phe Leu Ser Gln  
20 25 30  
Lys Ala Gly Pro Thr Glu Gln Phe Lys Leu Cys Ser Ser Arg Leu Lys  
35 40 45  
Ala Gly Phe Val Glu Glu Leu Gln Leu Leu Ser Arg Ala Asn Pro Val  
50 55 60  
Val Ile Gln Gly Glu Cys Lys Leu Ala Ser Leu Asp Arg Asp Gln Ser  
65 70 75 80

<210> 5726  
<211> 51  
<212> PRT  
<213> Homo sapiens

<400> 5726  
Ile Gln Ile Asn Phe His Ala His Leu Tyr Leu Lys Asp Ser Asp Phe  
1 5 10 15  
Ser Leu Ser Gln Leu Arg Asn Ile Arg Leu Asn Pro Ala Val Leu Gln  
20 25 30  
Met Phe Leu Leu Arg Leu Lys His Gln Leu Ile Asn Arg Tyr Leu Phe  
35 40 45  
Ile Phe Asn  
50

<210> 5727  
<211> 38  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (2)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5727  
Pro Xaa Ser Ser Trp Asp Tyr Arg His Thr Pro Pro Cys Pro Ala His  
1 5 10 15



## 5027

Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp  
                   20                  25                  30

Leu His Leu Leu Thr Leu  
                   35

<210> 5728  
 <211> 112  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (6)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (8)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (109)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5728  
 Ser Lys Asp Gly Ala Xaa Cys Xaa Lys Ser Lys Asp Leu Leu Lys Gln  
   1                  5                  10                  15

Arg Tyr Leu Phe Ala Lys Ala Gly Tyr Pro Leu Arg Arg Ser Gln Ser  
                   20                  25                  30

Leu Pro Thr Thr Leu Leu Ser Pro Val Arg Val Val Ser Ser Val Asn  
                   35                  40                  45

Val Arg Leu Ser Pro Gly Lys Glu Thr Arg Cys Ser Pro Pro Ser Phe  
                   50                  55                  60

Thr Tyr Lys Tyr Thr Pro Glu Glu Glu Gln Glu Leu Glu Lys Arg Val  
   65                  70                  75                  80

Met Glu His Asp Gly Gln Ser Leu Val Lys Ser Thr Ile Phe Ile Ser  
                   85                  90                  95

Pro Ser Ser Val Lys Lys Glu Glu Ala Pro Gln Ser Xaa Ala Pro Arg  
                   100                  105                  110

5028

&lt;210&gt; 5729

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5729

Ile Leu Phe Ala Pro Pro Arg Phe Ala Pro Glu Arg Gln Ser Ser Ser  
1 5 10 15

Arg Gly Pro Leu Arg His Arg Tyr Ser Ser Gln Ile Xaa Thr His Phe  
20 25 30

Thr Ala Thr Pro Gly Ile Leu Pro Pro Leu Arg Asp Ser Ser Leu Pro  
35 40 45

Val Ser Asp Ala Val Pro Arg Leu Ser Pro Gly Ile Ser His Leu Thr  
50 55 60

&lt;210&gt; 5730

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5730

Ser Leu Ser Ala Pro Glu Leu Lys Ser Leu Ala Lys Thr Phe His Leu  
1 5 10 15

Val Asn Pro Asn Gly Gln Lys Gln Gln Leu Val Asp Ala Phe Leu Lys  
20 25 30

Leu Ala Lys Gln Arg Ser Val Cys Thr Trp Gly Lys Asn Lys Pro Gly  
35 40 45

Ile Gly Ala Val Ile Leu Lys Arg Phe Cys Trp Leu Leu Leu Gln  
50 55 60

5029

&lt;210&gt; 5731

&lt;211&gt; 94

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (64)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5731

Glu	Met	Ser	His	Lys	Glu	Arg	His	Phe	Glu	Leu	Leu	Leu	Lys	Ser	Cys
1				5					10					15	

Lys	Val	Ser	Tyr	Pro	Gly	Thr	Val	Phe	Leu	Asn	Gly	Asn	Val	Met	Ala
			20					25					30		

Glu	Ser	Cys	Ser	Ile	Thr	Thr	Xaa	Gly	Leu	Val	His	Gln	Val	Pro	Thr
		35					40					45			

His	Pro	Leu	Gln	Ala	Leu	Gly	Ser	Gly	Met	Cys	Pro	Ser	Trp	Lys	Xaa
	50					55					60				

Gln	Val	Leu	Trp	Leu	Cys	Trp	Phe	Trp	Leu	Ser	Phe	Ser	Val	Thr	Phe
65				70					75						80

Gln	Tyr	Leu	Ser	Pro	Ser	Arg	Tyr	Cys	Lys	Pro	Leu	Ser	Asn
			85						90				

&lt;210&gt; 5732

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5732

Gly	Xaa	Gly	Phe	Trp	Pro	Ala	Ser	Val	Ala	Arg	Val	Leu	Thr	Gly	Val
1				5					10					15	

## 5030

Thr Asn His Leu Ala Phe Asn Thr Lys Lys Pro His Ile Leu Arg Asn  
                   20                                  25                                  30  
 Pro Arg Thr Gln Lys Val Leu Gly Phe Val Ser Asp Ala Glu Gly Trp  
                   35                                  40                                  45  
 Val Glu Ser Met Lys Pro Thr Gln Arg Asp Asp Ser Thr Ile Cys Ser  
                   50                                  55                                  60  
 Ile Gly Trp Lys Trp Arg Gly  
                   65                                  70

<210> 5733  
 <211> 85  
 <212> PRT  
 <213> Homo sapiens

<400> 5733  
 His Gln Trp Arg Gly Ala Leu His Ile Leu Cys Gln Gln Gln His Ser  
   1                                  5                                  10                                  15  
 His Thr Arg Trp Phe Trp Ala Leu Cys Arg Leu Val Leu Val Gly Asp  
                   20                                  25                                  30  
 Thr Gln Gln His Pro Cys Trp Thr Gly Leu Ile Val Arg Ser Leu Arg  
                   35                                  40                                  45  
 Pro Thr Leu Gln Ser Glu Met Leu Leu Gly Gly Gly Lys Glu Asn Thr  
                   50                                  55                                  60  
 Phe Phe Pro Pro Cys Gly Asn Glu Glu Arg Gly Lys Trp Ile Gly Lys  
                   65                                  70                                  75                                  80  
 Pro Lys Cys Glu Ser  
                                   85

<210> 5734  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

<400> 5734  
 Phe Ser Leu Thr Leu Phe Pro Pro Pro Thr Cys His Gln Ala Ser Pro  
   1                                  5                                  10                                  15  
 Lys Pro Thr Ala Met Gly Pro Ser Gly Pro Phe Arg Asp Trp Ser Glu  
                   20                                  25                                  30

## 5031

Ile Trp Val Trp Arg Gly Arg Arg Gln Gly Gly Gly Ala Ser His Ser  
           35                          40                          45

Arg Thr Val Asp Glu Arg Asp Arg Leu Arg Arg Lys Trp Ala Leu Arg  
           50                          55                          60

Leu Gln Gly Trp Lys Ser Leu Pro Thr Ser His Ser Pro Ala Pro Ile  
           65                          70                          75                          80

Tyr Leu Val Leu Pro Arg Gln Ile Gly Pro Phe Glu Ala Pro Glu Cys  
                           85                          90                          95

Pro Gln Met Val Lys Thr Gln Phe Ser Leu Trp Glu Pro Lys Pro Gly  
                   100                          105                          110

Cys Ile Gly Gly Gln Asp Pro Asp His Ser Leu  
           115                          120

<210> 5735

<211> 42

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (32)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

400> 5735

ys Cys Pro Ile Ala Ser Glu Ala Pro Trp Thr Ile Thr Asp Ala Glu  
   1                          5                          10                          15

u Arg Val Xaa Leu Thr Val Glu Asp Ser Gln Pro Tyr Glu Asp Xaa  
           20                          25                          30

u Xaa Gly Arg Ser Ser Leu Ser Lys Val  
           35                          40

5032

<210> 5736  
 <211> 34  
 <212> PRT  
 <213> Homo sapiens

<400> 5736  
 Tyr Pro Thr His Tyr Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser  
     1                    5                    10                    15  
 Gly Ile Pro Gly Ser Thr His Ala Ser Gly Ile Leu Gly Leu Arg Phe  
                     20                    25                    30  
 Phe Met

<210> 5737  
 <211> 202  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (167)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (195)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5737  
 Tyr Ser Arg Pro Gln Ala His Ser Ser Ala Ser Gly Gly Ile Arg Arg  
     1                    5                    10                    15  
 Ser Ser Ser Met Ser Tyr Val Asp Gly Phe Ile Gly Thr Trp Pro Lys  
                     20                    25                    30  
 Glu Lys Arg Ser Ser Val His Gly Val Ser Phe Asp Ile Ser Phe Asp  
                     35                    40                    45  
 Lys Glu Asp Ser Val Gln Arg Ser Thr Pro Asn Arg Gly Ile Thr Arg  
                     50                    55                    60  
 Ser Ile Ser Asn Glu Gly Leu Thr Leu Asn Asn Ser His Val Ser Lys  
     65                    70                    75                    80  
 His Ile Arg Lys Asn Leu Ser Phe Lys Pro Ile Asn Gly Glu Glu Glu

## 5033

85								90				95			
Ala	Glu	Ser	Ile	Glu	Glu	Glu	Leu	Asn	Ile	Asp	Ser	His	Ser	Asp	Leu
100								105				110			
Lys	Ser	Cys	Val	Pro	Leu	Asn	Thr	Asn	Glu	Leu	Asn	Ser	Asn	Glu	Asn
115								120				125			
Ile	His	Tyr	Lys	Leu	Pro	Asn	Gly	Ala	Leu	Gln	Asn	Arg	Ile	Leu	Leu
130								135				140			
Asp	Glu	Phe	Gly	Asn	Gln	Ile	Glu	Thr	Pro	Ser	Ile	Glu	Glu	Ala	Leu
145								150				155			
Gln	Ile	Ile	His	Asp	Thr	Xaa	Lys	Ser	Pro	His	Thr	Pro	Gln	Pro	Asp
165								170				175			
Gln	Ile	Ala	Asn	Gly	Phe	Phe	Leu	His	Ser	Gln	Gly	Met	Ser	Ile	Leu
180								185				190			
Asn	Ser	Xaa	Ile	Lys	Leu	Asn	Gln	Ser	Ser						
195								200							

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<210> 5738
<211> 35
<212> PRT
<213> Homo sapiens
```

```
<400> 5738
Gly Arg Ile Ser His Val Gly Ser Arg Thr Glu Gly Ser Arg Leu Pro
 1             5             10             15
Ala Gln Cys Ser Leu Cys Ser Thr Met Leu Pro Leu Val Gly Glu Thr
      20             25             30
Gly Gln Lys
      35
```

```
<210> 5739
<211> 35
<212> PRT
<213> Homo sapiens
```

```

:400> 5739
Pln Trp Gly Lys Lys Ala Val Ser Arg Gly Phe Ser Lys Gly Asn Thr
      1             5             10             15

```

## 5034

Gln Met Ala Lys Lys His Met Gln Arg Cys Ser Met Phe Phe Val Ile  
                   20                                  25                                  30

Arg Lys Met  
                   35

<210> 5740  
 <211> 220  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (65)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (96)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (117)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5740  
 Glu Lys Thr Ile Leu Thr Gly Glu Cys Cys Tyr Leu Asn Pro Leu Leu  
   1                                  5                                  10                                  15

Arg Arg Ile Ile Arg Phe Thr Gly Val Phe Ala Phe Gly Leu Phe Ala  
                   20                                  25                                  30

Thr Asp Ile Phe Val Asn Ala Gly Gln Val Val Thr Gly His Leu Thr  
                   35                                  40                                  45

Pro Tyr Phe Leu Thr Val Cys Lys Pro Asn Tyr Thr Ser Ala Asp Cys  
                   50                                  55                                  60

Xaa Ala His His Gln Phe Ile Asn Asn Gly Asn Ile Cys Thr Gly Asp  
   65                                  70                                  75                                  80

Arg Glu Val Ile Glu Lys Ala Arg Arg Ser Phe Pro Ser Lys His Xaa  
                   85                                  90                                  95

Ala Leu Ser Ile Tyr Ser Ala Leu Tyr Ala Thr Met Tyr Ile Thr Ser  
                   100                                  105                                  110

Thr Ile Lys Thr Xaa Ser Ser Arg Leu Ala Lys Pro Val Leu Cys Leu



## 5035

115		120		125
Gly Thr Leu Cys Thr Ala Phe Leu Thr Gly Leu Asn Arg Val Ser Glu				
130		135		140
Tyr Arg Asn His Cys Ser Asp Val Ile Ala Gly Phe Ile Leu Gly Thr				
145		150		155 160
Ala Val Ala Leu Phe Leu Gly Met Cys Val Val His Asn Phe Lys Gly				
	165		170	175
Thr Gln Gly Ser Pro Ser Lys Pro Lys Pro Glu Asp Pro Arg Gly Val				
	180		185	190
Pro Leu Met Ala Phe Pro Arg Ile Glu Ser Pro Leu Glu Thr Leu Ser				
	195		200	205
Ala Gln Asn His Ser Ala Ser Met Thr Glu Val Thr				
210		215		220

<210> 5741  
 <211> 38  
 <212> PRT  
 <213> Homo sapiens

<400> 5741  
 Lys Thr Phe Arg Leu Phe Leu Ala Ile Ser Leu Thr Phe Ala Thr Ile  
 1 5 10 15  
 Val Thr Lys His Ser Leu Tyr Met His Pro Pro Asn Val Ser Cys Leu  
 20 25 30  
 Phe Ile Gly Lys Leu Tyr  
 35

<210> 5742  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (14)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE

## 5036

&lt;222&gt; (23)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (57)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5742

Trp	Gln	Gly	His	Trp	Pro	Gly	Pro	His	Leu	Pro	Ser	Ser	Xaa	Leu	Pro
1				5					10					15	

Lys	Arg	Lys	Leu	Pro	Trp	Xaa	Ser	Arg	Pro	Leu	Asn	Ala	Asn	Ser	Trp
			20					25						30	

Leu	Pro	Val	Ser	Gly	Trp	Val	Asp	Leu	Thr	Trp	Pro	Leu	Leu	Ala	Gly
		35					40						45		

Pro	Cys	Ser	Phe	Leu	Thr	Cys	Arg	Xaa	Glu	Gln
	50					55				

&lt;210&gt; 5743

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5743

Xaa	Leu	Val	Ala	Gly	Asp	Ile	Val	Leu	Asp	Lys	Leu	Gly	Glu	Arg	Leu
1				5					10					15	

Ala	Ile	Leu	Leu	Lys	Val	Arg	Asp	Met	Val	Ser	Ser	His	Val	Glu	Arg
			20					25						30	

Val	Phe	Gln	Ile	Tyr	Glu	Gln	His	Ala	Asp	Thr	Val	Gly	Ile	Asp	Ala
		35					40					45			

Val	Leu	Gln	Pro	Ser	Ala	Val	Ser	Pro	Ser	Val	Ala	Asp	Met	Leu	Glu
	50					55					60				

Trp	Leu	Gln	Asp	Ile	Glu	Arg	His	Tyr	Arg	Lys	Ser	Tyr	Leu	Lys	Arg
65					70					75					80

Lys	Tyr	Leu	Leu	Ser	Ser	Ile	Gln	Trp	Gly	Asp	Leu	Ala	Asn	Ile	Gln
				85					90						95

## 5037

Ala Leu Pro Lys Ala Trp Asp Arg Ile Ser Lys Asp Glu His Gln Asp  
                   100                                  105                                  110

Leu Val Gln Asp Ile Leu Leu Asn Val Ser  
                   115                                  120

<210> 5744

<211> 66

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5744

Thr Xaa Asn Phe His Xaa Arg Xaa Glu Val Ile Asn Ser Gly His Gln  
       1                                  5                                  10                                  15

Arg Ile Leu Ala Ser Ala Leu Gly Leu Val Met Tyr Gln Val Trp Tyr  
                   20                                  25                                  30

Tyr Phe Leu Phe Val Leu Ile Arg Phe Leu Pro Ser Ser Ser Ile Trp  
                   35                                  40                                  45

Glu Ile Lys Thr Gly Leu Leu Ala Trp Leu Val Thr Glu Arg Gln Ala  
                   50                                  55                                  60

His Ser  
       65

<210> 5745

<211> 59

<212> PRT

<213> Homo sapiens

5038

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5745

Ser	Phe	Pro	Pro	Arg	Asn	Ser	Pro	Arg	Leu	Lys	Thr	Xaa	Leu	His	Tyr
1				5					10					15	

Gln	Val	Met	Arg	Cys	Glu	Gly	Gly	Ser	Leu	Lys	Val	Glu	Asn	Leu	Gly
			20					25					30		

Val	Glu	Ala	Thr	Val	Pro	Ser	Trp	Xaa	Leu	Ser	Phe	Leu	Ile	Cys	Glu
		35					40					45			

Met	Arg	Val	Asn	Val	Lys	Leu	Leu	Cys	Lys	Met
		50				55				

&lt;210&gt; 5746

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (111)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5746

Lys	Ala	Thr	Leu	Leu	Ser	Cys	Glu	Ala	His	His	Leu	Ser	Leu	Ala	Leu
1				5					10					15	

Gly	Ser	Ser	Cys	Arg	Arg	Ser	Leu	Gly	Pro	Leu	Met	His	Pro	Phe	Gln
			20					25					30		

Gln	Thr	Phe	His	Phe	Gly	Val	Arg	Xaa	Asp	Phe	Leu	Ala	Leu	Gln	Gly
		35					40					45			

## 5039

Ala Pro Ala Ser Ser Cys Ile Pro Cys Pro Gly Pro Gly Ile Ser Pro  
 50 55 60

Phe Ser Lys Glu Pro Arg Val Leu Leu Leu Ala Ser Leu Lys Arg Val  
 65 70 75 80

Arg Pro Gly Cys Gln Ala Gly Ser Pro Arg Ser Phe Tyr Trp Glu Val  
 85 90 95

Leu Glu Ser Glu Ala Trp Val Pro Gly Gly Cys Gln Val Gly Xaa Val  
 100 105 110

Leu Leu Gly Cys Cys  
 115

&lt;210&gt; 5747

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5747

Leu Thr Leu Thr Lys Gly Asn Lys Ser Trp Gly Ser Thr Ala Val Thr  
 1 5 10 15

Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg  
 20 25 30

Gly Leu Val Arg Val Phe Phe Phe Phe Phe Phe Lys Thr Asn Thr Phe  
 35 40 45

Ile Ala His Leu  
 50

&lt;210&gt; 5748

&lt;211&gt; 270

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (266)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5748

Thr Leu Glu Gln Glu Gln Glu Ala Leu Val Asn Arg Leu Trp Lys Arg  
 1 5 10 15

## 5040

Met Asp Lys Leu Glu Ala Glu Lys Arg Ile Leu Gln Glu Lys Leu Asp  
                   20                                  25                                  30  
 Gln Pro Val Ser Ala Pro Pro Ser Pro Arg Asp Ile Ser Met Glu Ile  
                   35                                  40                                  45  
 Asp Ser Pro Glu Asn Met Met Arg His Ile Arg Phe Leu Lys Asn Glu  
                   50                                  55                                  60  
 Val Glu Arg Leu Lys Lys Gln Leu Arg Ala Ala Gln Leu Gln His Ser  
                   65                                  70                                  75                                  80  
 Glu Lys Met Ala Gln Tyr Leu Glu Glu Glu Arg His Met Arg Glu Glu  
                                   85                                  90                                  95  
 Asn Leu Arg Leu Gln Arg Lys Leu Gln Arg Glu Met Glu Arg Arg Glu  
                   100                                  105                                  110  
 Ala Leu Cys Arg Gln Leu Ser Glu Ser Glu Ser Ser Leu Glu Met Asp  
                   115                                  120                                  125  
 Asp Glu Arg Tyr Phe Asn Glu Met Ser Ala Gln Gly Leu Arg Pro Arg  
                   130                                  135                                  140  
 Thr Val Ser Ser Pro Ile Pro Tyr Thr Pro Ser Pro Ser Ser Ser Arg  
                   145                                  150                                  155                                  160  
 Pro Ile Ser Pro Gly Leu Ser Tyr Ala Ser His Thr Val Gly Phe Thr  
                                   165                                  170                                  175  
 Pro Pro Thr Ser Leu Thr Arg Ala Gly Met Ser Tyr Tyr Asn Ser Pro  
                   180                                  185                                  190  
 Gly Leu His Val Gln His Met Gly Thr Ser His Gly Ile Thr Arg Pro  
                   195                                  200                                  205  
 Ser Pro Arg Arg Ser Asn Ser Pro Asp Lys Phe Lys Arg Pro Thr Pro  
                   210                                  215                                  220  
 Pro Pro Ser Pro Asn Thr Gln Thr Pro Val Gln Pro Pro Pro Pro Pro  
                   225                                  230                                  235                                  240  
 Pro Pro Pro Pro Met Gln Pro Thr Val Pro Ser Ala Ala Thr Ser Gln  
                                   245                                  250                                  255  
 Pro Thr Pro Ser Gln His Ser Ala His Xaa Ser Ser Gln Pro  
                   260                                  265                                  270

&lt;210&gt; 5749

## 5041

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5749

Val Ile Gln Val Tyr Thr Ser Val Lys Ile Gln Arg Met Tyr Thr Gln  
 1 5 10 15

Asp Leu Cys Ile Ser Leu Tyr Val Asn Val Thr Leu Lys Cys Cys Lys  
 20 25 30

Gln Ile Leu Asn Lys Tyr Thr His Ala Lys Val Phe Lys Arg Lys Tyr  
 35 40 45

Trp Cys Leu Gln Asn Lys Asn Phe Phe Ser Ile Phe Cys Gly Lys Ile  
 50 55 60

Tyr Ile Ile  
 65

&lt;210&gt; 5750

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5750

Pro Arg Gly Ser Val Gly Val Ser Ser Glu Leu His Gln Phe Pro Gly  
 1 5 10 15

Tyr Leu Gly Pro Trp Ile Thr Leu Arg Ser Ala Thr Cys Gln Leu Ile  
 20 25 30

Ser Lys Leu Leu Leu Ala Gly Leu Arg Leu Ser Arg Glu His Leu Gly  
 35 40 45

Glu Pro Cys Ala Ala Gly Trp Thr Pro Ala His Leu Ala Asp Tyr Ser  
 50 55 60

Cys Phe Cys Ser Pro Val Cys Pro Gln Glu Val Arg Ala Cys Leu Leu  
 65 70 75 80

Phe Leu His Asp His Gly Arg Arg Gly Thr Asn Met Arg Val Leu Ala  
 85 90 95

Ser Pro Gln Trp Trp Leu Pro Arg Ala Gly Glu Thr Leu Gly Glu Gly  
 100 105 110

Leu Gly Gln Gly Pro Leu Ser Leu Ala Ala Thr Ala Trp Val Asn Cys  
 115 120 125

5042

Leu Ala Arg Leu Ala Ala Arg Ala Gln Lys Ala Glu Ala Leu Pro Ala  
 130 135 140

Phe Ser Ser His Pro Ala Pro Met  
 145 150

&lt;210&gt; 5751

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5751

Arg Val Ala Val Glu Asp Val Ser Met Val Lys Gln Lys Asn Thr Thr  
 1 5 10 15

Phe Leu Trp Lys Glu Ile Leu Lys Gln Gln Ser Gln Ile Val Lys Met  
 20 25 30

Leu Arg Ile Ser Val Pro Pro Leu Thr Ser Val Ser Val Lys Pro Gln  
 35 40 45

Leu Gly Cys Thr Glu Asp Tyr Leu Leu Ser Lys Leu Pro Ser Asp Gly  
 50 55 60

Lys Glu Val Pro Phe Val Val Arg Lys Phe Lys Leu Ser Tyr Ile Gln  
 65 70 75 80

Pro Arg Thr Gln Glu Thr Pro Ser His Leu Glu Glu Leu Glu Gly Ser  
 85 90 95

Ala Gly

&lt;210&gt; 5752

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (81)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5752

Asp Arg Lys Arg Asp Leu Thr Ser Pro Trp Arg Leu Ser Val Ser Ala  
 1 5 10 15



## 5043

Glu Ala Leu Gly Leu Ala Leu Gly Leu Cys Ile Pro Glu Ser Cys Cys  
                   20                  25                  30  
 Met Pro Gly Ile Gly Phe Gln Ala Cys Leu Ser Phe Ser Ser Leu Pro  
                   35                  40                  45  
 Gly Ile Ala Met Arg Trp Glu Gly Glu Pro Ser Ser Pro Ala Glu Ile  
                   50                  55                  60  
 Pro Ala Ala Trp Gln Pro Ala Gly Gly Ser Trp Ile Pro Arg Gly Asp  
                   65                  70                  75                  80  
 Xaa Thr Asp Ala Leu Trp Phe His Val Ile Trp Ile  
                                   85                                  90

&lt;210&gt; 5753

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (74)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (81)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5753

Pro Arg Arg His Arg Val Pro Gly Ser Gly Phe Ala Phe Pro Lys Asn  
           1                  5                  10                  15

## 5044

Glu Asn Lys Leu Leu Pro Lys Glu Leu Val Phe Pro Leu Leu Phe Ser  
                   20                                  25                                  30  
 Asn Cys Glu Gly Pro Arg Gly Val Glu His Gly Ala Pro His Lys Pro  
                   35                                  40                                  45  
 Xaa Gly Trp Cys Pro Gly Tyr Gln Gly His Ala Xaa Gly Leu Asp Asp  
                   50                                  55                                  60  
 Leu Ser Leu Gln Gly Ala Leu Val Val Xaa Asn Trp Leu Lys Val Thr  
                   65                                  70                                  75                                  80  
 Xaa Glu Gly Xaa Cys Gly Asn Trp  
   85

&lt;210&gt; 5754

&lt;211&gt; 28

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5754

Lys Ile Phe Ser Phe Ala Val Pro Asp Pro Leu Met Pro Asp Pro Xaa  
   1                                  5                                  10                                  15

Lys Gln Pro Lys Asn Gln Leu Asn Pro Ile Gly Ser  
                   20                                  25

&lt;210&gt; 5755

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5755

Arg Met Asn Ile Cys Val Ser Val Cys Val Ser Glu Leu Cys Asp Phe  
   1                                  5                                  10                                  15

Ile Arg Gly Ile Cys Gln Phe Ser His Cys Gly Ser Phe Ser Asp Phe  
                   20                                  25                                  30

Ala Cys Ser Ser Ser Lys Glu Ala Arg Ser Phe Ala Asp Phe Thr Ile  
                   35                                  40                                  45

## 5045

Pro Gln Thr Cys Lys Phe Leu Thr Ser Ser Lys Leu Ala Leu Ala Leu  
 50 55 60

Ser Ser Thr Phe Pro Phe Lys Ser Asn Leu Cys  
 65 70 75

<210> 5756

<211> 540

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (320)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (508)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5756

Thr Met Asp Glu Glu Lys Asp Asp Gly Glu Ala Lys Glu Ile Ser  
 1 5 10 15

Thr Pro Thr His Trp Ser Lys Leu Asp Pro Lys Thr Met Lys Val Asn  
 20 25 30

Asp Leu Arg Lys Glu Leu Glu Ser Arg Ala Leu Ser Ser Lys Gly Leu  
 35 40 45

Lys Ser Gln Leu Ile Ala Arg Leu Thr Lys Gln Leu Lys Val Glu Glu  
 50 55 60

Gln Lys Glu Glu Gln Lys Glu Leu Glu Lys Ser Glu Lys Glu Glu Asp  
 65 70 75 80

Glu Asp Asp Asp Arg Lys Ser Glu Asp Asp Lys Glu Glu Glu Glu Arg  
 85 90 95

Lys Arg Gln Glu Glu Ile Glu Arg Gln Arg Arg Glu Arg Arg Tyr Ile  
 100 105 110

Leu Pro Asp Glu Pro Ala Ile Ile Val His Pro Asn Trp Ala Ala Lys  
 115 120 125

Ser Gly Lys Phe Asp Cys Ser Ile Met Ser Leu Ser Val Leu Leu Asp  
 130 135 140

## 5046

Tyr Arg Leu Glu Asp Asn Lys Glu His Ser Phe Glu Val Ser Leu Phe  
 145 150 155 160  
 Ala Glu Leu Phe Asn Glu Met Leu Gln Arg Asp Phe Gly Val Arg Ile  
 165 170 175  
 Tyr Lys Ser Leu Leu Ser Leu Pro Glu Lys Glu Asp Lys Lys Glu Lys  
 180 185 190  
 Asp Lys Lys Ser Lys Lys Asp Glu Arg Lys Asp Lys Lys Glu Glu Arg  
 195 200 205  
 Asp Asp Glu Thr Asp Glu Pro Lys Pro Lys Arg Arg Lys Ser Gly Asp  
 210 215 220  
 Asp Lys Asp Lys Lys Glu Asp Arg Asp Glu Arg Lys Lys Glu Asp Lys  
 225 230 235 240  
 Arg Lys Asp Asp Ser Lys Asp Asp Asp Glu Thr Glu Glu Asp Asn Asn  
 245 250 255  
 Gln Asp Glu Tyr Asp Pro Met Glu Ala Glu Glu Ala Glu Asp Glu Glu  
 260 265 270  
 Asp Asp Arg Asp Glu Glu Glu Met Thr Lys Arg Asp Asp Lys Arg Asp  
 275 280 285  
 Ile Asn Arg Tyr Cys Lys Glu Arg Pro Ser Lys Asp Lys Glu Lys Glu  
 290 295 300  
 Lys Thr Gln Met Ile Thr Ile Asn Arg Asp Leu Leu Met Ala Phe Xaa  
 305 310 315 320  
 Tyr Phe Asp Gln Ser His Cys Gly Tyr Leu Leu Glu Lys Asp Leu Glu  
 325 330 335  
 Glu Ile Leu Tyr Thr Leu Gly Leu His Leu Ser Arg Ala Gln Val Lys  
 340 345 350  
 Lys Leu Leu Asn Lys Val Val Leu Arg Glu Ser Cys Phe Tyr Arg Lys  
 355 360 365  
 Leu Thr Asp Thr Ser Lys Asp Glu Glu Asn His Glu Glu Ser Glu Ser  
 370 375 380  
 Leu Gln Glu Asp Met Leu Gly Asn Arg Leu Leu Leu Pro Thr Pro Thr  
 385 390 395 400  
 Val Lys Gln Glu Ser Lys Asp Val Glu Glu Asn Val Gly Leu Ile Val  
 405 410 415

## 5047

Tyr Asn Gly Ala Met Val Asp Val Gly Ser Leu Leu Gln Lys Leu Glu  
                   420                  425                  430

Lys Ser Glu Lys Val Arg Ala Glu Val Glu Gln Lys Leu Gln Leu Leu  
                   435                  440                  445

Glu Glu Lys Thr Asp Glu Asp Glu Lys Thr Ile Leu Asn Leu Glu Asn  
                   450                  455                  460

Ser Asn Lys Ser Leu Ser Gly Glu Leu Arg Glu Val Lys Lys Asp Leu  
                   465                  470                  475                  480

Ser Gln Leu Gln Glu Asn Leu Lys Ile Ser Glu Asn Met Asn Leu Gln  
                                   485                  490                  495

Phe Glu Asn Gln Met Asn Lys Thr Ile Arg Asn Xaa Ser Thr Val Met  
                   500                  505                  510

Asp Glu Ile His Thr Val Leu Lys Lys Asp Asn Val Lys Asn Glu Asp  
                   515                  520                  525

Lys Asp Gln Lys Ser Lys Glu Asn Gly Ala Ser Val  
                   530                  535                  540

<210> 5757

<211> 231

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (201)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (214)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (220)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5757

Glu Lys Gln Ala Glu Ile Leu Glu Tyr Ala Tyr His Gly Gln Ile Ala  
           1                  5                  10                  15

## 5048

Ile Val Ala Pro Glu Ala Leu Leu Ala Gly His Asn Tyr Thr Leu Lys  
                   20                  25                  30

Ile Glu Tyr Ser Ala Asn Ile Ser Ser Ser Tyr Tyr Gly Phe Tyr Gly  
           35                  40                  45

Phe Ser Tyr Thr Asp Glu Ser Asn Glu Lys Lys Tyr Phe Ala Ala Thr  
       50                  55                  60

Gln Phe Glu Pro Leu Ala Ala Arg Ser Ala Phe Pro Cys Phe Asp Glu  
       65                  70                  75                  80

Pro Ala Phe Lys Ala Thr Phe Ile Ile Lys Ile Ile Arg Asp Glu Gln  
                   85                  90                  95

Tyr Thr Ala Leu Ser Asn Met Pro Lys Lys Ser Ser Val Val Leu Asp  
           100                  105                  110

Asp Gly Leu Val Gln Asp Glu Phe Ser Glu Ser Val Lys Met Ser Thr  
           115                  120                  125

Tyr Leu Val Ala Phe Ile Val Gly Glu Met Lys Asn Leu Ser Gln Asp  
       130                  135                  140

Val Asn Gly Thr Leu Val Ser Ile Tyr Ala Val Pro Glu Lys Ile Gly  
       145                  150                  155                  160

Gln Val His Tyr Ala Leu Glu Thr Thr Val Lys Leu Leu Glu Phe Phe  
                   165                  170                  175

Gln Asn Tyr Phe Glu Ile Gln Tyr Pro Leu Lys Lys Leu Asp Leu Val  
           180                  185                  190

Ala Ile Pro Asp Phe Glu Ala Arg Xaa Asn Gly Lys Leu Gly Phe Cys  
           195                  200                  205

Ser Pro Ser Glu Lys Xaa Thr Leu Leu Phe Asp Xaa Tyr Thr Ser Ser  
       210                  215                  220

Met Ala Asp Lys Lys Ala Gly  
       225                  230

<210> 5758

<211> 294

<212> PRT

<213> Homo sapiens

<400> 5758

Asn Met Thr Glu Asp Ser Gln Arg Asn Phe Arg Ser Val Tyr Tyr Glu

## 5049

1	5	10	15
Lys Val Gly Phe Arg Gly Val Glu Glu Lys Lys Ser Leu Glu Ile Leu	20	25	30
Leu Lys Asp Asp Arg Leu Asp Thr Glu Lys Leu Cys Thr Phe Ser Gln	35	40	45
Arg Phe Pro Leu Pro Ser Met Tyr Arg Ala Leu Val Trp Lys Val Leu	50	55	60
Leu Gly Ile Leu Pro Pro His His Glu Ser His Ala Lys Val Met Met	65	70	75
Tyr Arg Lys Glu Gln Tyr Leu Asp Val Leu His Ala Leu Lys Val Val	85	90	95
Arg Phe Val Ser Asp Ala Thr Pro Gln Ala Glu Val Tyr Leu Arg Met	100	105	110
Tyr Gln Leu Glu Ser Gly Lys Leu Pro Arg Ser Pro Ser Phe Pro Leu	115	120	125
Glu Pro Asp Asp Glu Val Phe Leu Ala Ile Ala Lys Ala Met Glu Glu	130	135	140
Met Val Glu Asp Ser Val Asp Cys Tyr Trp Ile Thr Arg Arg Phe Val	145	150	155
Asn Gln Leu Asn Thr Lys Tyr Arg Asp Ser Leu Pro Gln Leu Pro Lys	165	170	175
Ala Phe Glu Gln Tyr Leu Asn Leu Glu Asp Gly Arg Leu Leu Thr His	180	185	190
Leu Arg Met Cys Ser Ala Ala Pro Lys Leu Pro Tyr Asp Leu Trp Phe	195	200	205
Lys Arg Cys Phe Ala Gly Cys Leu Pro Glu Ser Ser Leu Gln Arg Val	210	215	220
Trp Asp Lys Val Val Ser Gly Ser Cys Lys Ile Leu Val Phe Val Ala	225	230	235
Val Glu Ile Leu Leu Thr Phe Lys Ile Lys Val Met Ala Leu Asn Ser	245	250	255
Ala Glu Lys Ile Thr Lys Phe Leu Glu Asn Ile Pro Gln Asp Ser Ser	260	265	270
Asp Ala Ile Val Ser Lys Ala Ile Asp Leu Trp His Lys His Cys Gly			

## 5050

275

280

285

Thr Pro Val His Ser Ser  
290

&lt;210&gt; 5759

&lt;211&gt; 431

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5759

Xaa Phe Gly Ala Xaa Gly Thr Val Glu Ser Glu Thr Ser Pro Asp Arg  
1 5 10 15

Asp Lys Lys Lys Glu Gln Ser Glu Val Ser Val Ser Pro Arg Ala Ser  
20 25 30

Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser Arg Glu Arg Lys Arg  
35 40 45

Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser Arg Ser Arg Ser Lys  
50 55 60

Glu Gly Arg Arg His Glu Ser Lys Asp Lys Ser Ser Lys Lys His Lys  
65 70 75 80

Ser Glu Glu His Asn Asp Lys Glu His Ser Ser Asp Lys Gly Arg Glu  
85 90 95

Arg Leu Asn Ser Ser Glu Asn Gly Glu Asp Arg His Lys Arg Lys Glu  
100 105 110

Arg Lys Ser Ser Arg Gly Arg Ser His Ser Arg Ser Arg Ser Arg Glu  
115 120 125

Arg Arg His Arg Ser Arg Ser Arg Glu Arg Lys Lys Ser Arg Ser Arg  
130 135 140

Ser Arg Glu Arg Lys Lys Ser Arg Ser Arg Ser Arg Glu Arg Lys Lys



## 5051

145		150		155		160
Ser Arg Ser Arg Ser Arg Glu Arg Lys Arg Arg Ile Arg Ser Arg Ser						
		165		170		175
Arg Ser Arg Ser Arg His Arg His Arg Thr Arg Ser Arg Ser Arg Thr						
		180		185		190
Arg Ser Arg Ser Arg Asp Arg Lys Lys Arg Ile Glu Lys Pro Arg Arg						
		195		200		205
Phe Ser Arg Ser Leu Ser Arg Thr Pro Ser Pro Pro Pro Phe Arg Gly						
		210		215		220
Arg Asn Thr Ala Met Asp Ala Gln Glu Ala Leu Ala Arg Arg Leu Glu						
		225		230		235
Arg Ala Lys Lys Leu Gln Glu Gln Arg Glu Lys Glu Met Val Glu Lys						
		245		250		255
Gln Lys Gln Gln Glu Ile Ala Ala Ala Ala Ala Ala Thr Gly Gly Ser						
		260		265		270
Val Leu Asn Val Ala Ala Leu Leu Ala Ser Gly Thr Gln Val Thr Pro						
		275		280		285
Gln Ile Ala Met Ala Ala Gln Met Ala Ala Leu Gln Ala Lys Ala Leu						
		290		295		300
Ala Glu Thr Gly Ile Ala Val Pro Ser Tyr Tyr Asn Pro Ala Ala Val						
		305		310		315
Asn Pro Met Lys Phe Ala Glu Gln Glu Lys Lys Arg Lys Met Leu Trp						
		325		330		335
Gln Gly Lys Lys Glu Gly Asp Lys Ser Gln Ser Ala Glu Ile Trp Glu						
		340		345		350
Lys Leu Asn Phe Gly Asn Lys Asp Gln Asn Val Lys Phe Arg Lys Leu						
		355		360		365
Met Gly Ile Lys Ser Glu Asp Glu Ala Gly Cys Ser Ser Val Asp Glu						
		370		375		380
Glu Ser Tyr Lys Thr Leu Lys Gln Gln Glu Glu Val Phe Arg Asn Leu						
		385		390		395
Asp Ala Gln Tyr Glu Met Ala Arg Ser Gln Thr His Thr Gln Arg Gly						
		405		410		415
Met Gly Leu Gly Phe Thr Ser Ser Met Arg Gly Met Asp Ala Val						

5052

420

425

430

&lt;210&gt; 5760

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5760

Ala Gly Val Phe Ile Gly Glu Arg Lys Cys Val Val Trp Ala Gly Leu  
 1 5 10 15

Leu Val Glu Ala Gly Phe Leu Ala His Leu Leu Tyr Met Leu Pro Met  
 20 25 30

Asp Leu Arg Leu Glu Met Leu Lys Val Glu Trp Asn Tyr Phe Pro Pro  
 35 40 45

Lys Thr Phe Ile Tyr Ser Thr Pro Leu Tyr Pro  
 50 55

&lt;210&gt; 5761

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5761

Val Ile Phe Tyr Phe Thr Asn Lys Gly Thr Lys Ser Met Asn Ile Ser  
 1 5 10 15

Leu Phe Leu Ile Ile Ser Ala Leu Lys Tyr Phe Gly Tyr Leu Ala Pro  
 20 25 30

Val Arg Ala Asp Trp His Cys Leu Val Gln Glu Val Cys Ser Arg Cys  
 35 40 45

Ser Ala Ser Glu Leu His Tyr Asp Cys Pro Pro Thr Asn His Pro Pro  
 50 55 60

Ala Ser Pro Arg Glu Arg Gly Ile Gln Arg Gly Thr Val Leu Thr Arg  
 65 70 75 80

Ser Ser Gln Leu Asp Pro Gly Gln Arg Asn Pro Tyr Pro Gly Thr Leu  
 85 90 95

Ser Leu Ser

5053

&lt;210&gt; 5762

&lt;211&gt; 48

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5762

Pro Pro Ser Leu Thr Lys Gly Asn Lys Ser Trp Cys Ser Thr Ala Val  
1 5 10 15

Ala Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala  
20 25 30

Arg Phe Pro Leu Phe Leu Gly Val Ser Ile Leu Ser Pro Trp Lys Met  
35 40 45

&lt;210&gt; 5763

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (31)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (86)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5763

Trp Asn Glu His Arg Pro Leu Asn Pro Arg Tyr Glu Phe Lys Ser Gln  
1 5 10 15

Leu Trp Arg Trp Leu Leu Lys Val Ser Val Pro Ser Phe Phe Xaa Leu  
20 25 30

Tyr Lys Val Asp Ile Thr Ile Ser Asn Leu Gln Ser His Trp Glu Leu  
35 40 45

## 5054

Tyr Met Gln Arg Leu Gly Lys Ala Pro Gly Thr Trp Gln Ala Ile Ser  
 50 55 60  
 Lys Cys Trp Leu Leu Leu Leu Ser Leu Pro Phe Ser Gln Ser Ile  
 65 70 75 80  
 Ile Ile Ser Leu Xaa Xaa Gly Thr Met Ser Tyr Leu Pro Leu Tyr Phe  
 85 90 95  
 Pro Gln Tyr Phe Pro  
 100

&lt;210&gt; 5764

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5764

Cys Val Ile Leu Thr Lys Gly Ser Ser Leu Gly Gln Pro Ser Pro Gly  
 1 5 10 15  
 Leu Gly His Ile His Leu Val Ala Lys Pro Leu Leu Gly Pro Lys Tyr  
 20 25 30  
 Thr Pro Glu Ser Cys Gln Arg Lys Glu Ile Phe Lys Lys His Arg Gln  
 35 40 45  
 Ile Val Cys Lys Trp Lys Ile Pro Ile Gly Leu Asp Ser Cys Gly Gly  
 50 55 60  
 Lys Thr Ser Trp Val Pro Gly Gly Cys Gln Ser Trp Glu Leu Cys Arg  
 65 70 75 80  
 Tyr Glu Ser Gly Lys Ala Gln Arg Gln Ala Glu Ser Leu Tyr Gly Asp  
 85 90 95  
 Asn Leu Gln Cys Leu Leu Gly Phe Pro Asn Asn Leu Gly Val Gln Ser  
 100 105 110  
 Ile Gly Phe Phe Ser Pro Leu Pro Thr Pro Arg Lys Ile Ile Arg Lys  
 115 120 125  
 Met Phe Arg Arg Lys Glu Lys Asn  
 130 135

&lt;210&gt; 5765

## 5055

<211> 168  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (34)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (134)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (160)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (161)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (167)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5765  
 Val Arg Val Gln Glu Val Val Lys Glu Asn Glu Glu Leu His Gln Glu  
           1                  5                  10                  15  
 Leu Asn Lys Ser Ser Ala Val Thr Ser Glu Glu Trp Arg Gln Leu Gln  
                   20                  25                  30  
 Thr Xaa Ala Lys Leu Val Leu Glu Glu Asn Lys Leu Leu Leu Glu Gln  
           35                  40                  45  
 Leu Glu Ile Gln Gln Arg Lys Ala Lys Asp Ser His Gln Glu Arg Leu  
           50                  55                  60  
 Gln Glu Val Ser Lys Leu Thr Lys Gln Leu Met Leu Leu Glu Ala Lys  
           65                  70                  75                  80  
 Thr His Gly Gln Glu Lys Glu Leu Ala Glu Asn Arg Glu Gln Leu Glu  
                   85                  90                  95  
 Ile Leu Arg Ala Lys Cys Gln Glu Leu Lys Thr His Ser Asp Gly Lys  
           100                  105                  110

## 5056

Ile Ala Val Glu Val His Lys Ser Ile Val Asn Glu Leu Lys Ser Gln  
 115 120 125

Leu Gln Lys Glu Glu Xaa Lys Glu Arg Ala Glu Met Glu Glu Leu Met  
 130 135 140

Glu Lys Leu Thr Val Leu Gln Ala Gln Lys Lys Ser Leu Leu Leu Xaa  
 145 150 155 160

Xaa Asn Ile Leu Thr Glu Xaa Asn  
 165

<210> 5766  
 <211> 135  
 <212> PRT  
 <213> Homo sapiens

<400> 5766

Ile Arg His Glu Val Val Gly Gly Ser Gly Gly Val Tyr Ala Leu Cys  
 1 5 10 15

Ser Ala His Leu Ala Asn Val Val Met Asn Trp Ala Gly Met Arg Cys  
 20 25 30

Pro Tyr Lys Leu Leu Arg Met Val Leu Ala Leu Val Cys Met Ser Ser  
 35 40 45

Glu Val Gly Arg Ala Val Trp Leu Arg Phe Ser Pro Pro Leu Pro Ala  
 50 55 60

Ser Gly Pro Gln Pro Ser Phe Met Ala His Leu Ala Gly Ala Val Val  
 65 70 75 80

Gly Val Ser Met Gly Leu Thr Ile Leu Arg Ser Tyr Glu Glu Arg Leu  
 85 90 95

Arg Asp Gln Cys Gly Trp Trp Val Val Leu Leu Ala Tyr Gly Thr Phe  
 100 105 110

Leu Leu Phe Ala Val Phe Trp Asn Val Phe Ala Tyr Asp Leu Leu Gly  
 115 120 125

Ala His Ile Pro Pro Pro Pro  
 130 135

<210> 5767  
 <211> 351

## 5057

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5767

```

Ile Arg His Glu Ile Leu Trp Leu Leu Cys Ser His Arg Pro Ala Pro
 1              5              10              15

Gly Arg Pro Pro Thr His Asn Ala His Asn Trp Arg Leu Gly Gln Ala
          20              25              30

Pro Ala Xaa Trp Tyr Asn Asp Thr Tyr Pro Leu Ser Pro Pro Gln Arg
          35              40              45

Thr Pro Ala Gly Ile Arg Tyr Arg Ile Ala Val Ile Ala Asp Leu Asp
 50              55              60

Thr Glu Ser Arg Ala Gln Glu Glu Asn Thr Trp Phe Ser Tyr Leu Lys
 65              70              75              80

Lys Gly Tyr Leu Thr Leu Ser Asp Ser Gly Asp Lys Val Ala Val Glu
          85              90              95

Trp Asp Lys Asp His Gly Val Leu Glu Ser His Leu Ala Glu Lys Gly
          100              105              110

Arg Gly Met Glu Leu Ser Asp Leu Ile Val Phe Asn Gly Lys Leu Tyr
          115              120              125

Ser Val Asp Asp Arg Thr Gly Val Val Tyr Gln Ile Glu Gly Ser Lys
          130              135              140

Ala Val Pro Trp Val Ile Leu Ser Asp Gly Asp Gly Thr Val Glu Lys
          145              150              155              160

Gly Phe Lys Ala Glu Trp Leu Ala Val Lys Asp Glu Arg Leu Tyr Val
          165              170              175

Gly Gly Leu Gly Lys Glu Trp Thr Thr Thr Thr Gly Asp Val Val Asn
          180              185              190

Glu Asn Pro Glu Trp Val Lys Val Val Gly Tyr Lys Gly Ser Val Asp
          195              200              205

His Glu Asn Trp Val Ser Asn Tyr Asn Ala Leu Arg Ala Ala Ala Gly
          210              215              220

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## 5058

Ile Gln Pro Pro Gly Tyr Leu Ile His Glu Ser Ala Cys Trp Ser Asp  
225 230 235 240

Thr Leu Gln Arg Trp Phe Phe Leu Pro Arg Arg Ala Ser Gln Glu Arg  
245 250 255

Tyr Ser Glu Lys Asp Asp Glu Arg Lys Gly Ala Asn Leu Leu Leu Ser  
260 265 270

Ala Ser Pro Asp Phe Gly Asp Ile Ala Val Ser His Val Gly Ala Val  
275 280 285

Val Pro Thr His Gly Phe Ser Ser Phe Lys Phe Ile Pro Asn Thr Asp  
290 295 300

Asp Gln Ile Ile Val Ala Leu Lys Ser Glu Glu Asp Ser Gly Arg Val  
305 310 315 320

Ala Ser Tyr Ile Met Ala Phe Thr Leu Asp Gly Arg Phe Leu Leu Pro  
325 330 335

Glu Thr Lys Ile Gly Ser Val Lys Tyr Glu Gly Ile Glu Phe Ile  
340 345 350

<210> 5768

<211> 55

<212> PRT

<213> Homo sapiens

<400> 5768

Asn Tyr Gln Ile Ser Glu Ile Tyr Phe Leu Leu Val Thr Met Lys Ser  
1 5 10 15

Thr Phe Thr Leu Glu Ser Asn Cys Asn Thr Pro Lys Ile Arg Ala Thr  
20 25 30

Lys Gly Met Tyr Gly Ala Phe Phe Asn Leu Lys Asn Cys Ile Leu Phe  
35 40 45

Leu Ile Pro Tyr Leu Lys His  
50 55

<210> 5769

<211> 121

<212> PRT

<213> Homo sapiens



## 5059

&lt;400&gt; 5769

```

Tyr Pro Phe Phe Thr Leu Cys Gln Arg Asn Arg Val Phe Asp Ile Ser
 1              5              10              15

Ser Tyr Val Lys Glu Met Leu Gln Asn Val Asn Cys Phe Lys Leu Lys
          20              25              30

Leu Pro Leu Lys Arg Pro Arg Tyr Ile Tyr Leu Ile Val Tyr Ile Met
          35              40              45

Phe Asn Ile Cys Gln Ser Ile Leu Gln Val Cys Ser Phe Ile Ser Ile
          50              55              60

Lys Tyr Gly Tyr Tyr Val Ala Gln Leu Leu Lys Trp Tyr Cys Ile Val
          65              70              75              80

Tyr Ile Cys Thr Pro Asn Asn Ile Val Cys Thr Phe Cys Phe Leu Tyr
          85              90              95

Cys Ile Cys Ala Gly Phe Phe Arg Leu Tyr Gln Cys Asn Leu Cys Leu
          100              105              110

Leu Arg Tyr Val Gln Lys Met Ser Ile
          115              120

```

&lt;210&gt; 5770

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (181)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5770

```

Glu Phe Gly Thr Ser His Trp Asp Met Ser Leu Pro Leu Ile Val Thr
 1              5              10              15

Leu Ser Thr Ile Ser Ile Ile Leu Leu Ala Ala Met Ile Thr Ile Ala
          20              25              30

Val Lys Cys Lys Arg Glu Asn Lys Glu Ile Arg Thr Tyr Asn Cys Arg
          35              40              45

Ile Ala Glu Tyr Ser His Pro Gln Leu Gly Gly Gly Lys Gly Lys Lys
          50              55              60

Lys Lys Ile Asn Lys Asn Asp Ile Met Leu Val Gln Ser Glu Val Glu

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## 5060

65		70		75		80									
Glu	Arg	Asn	Ala	Met	Asn	Val	Met	Asn	Val	Val	Ser	Ser	Pro	Ser	Leu
				85					90					95	
Ala	Thr	Ser	Pro	Met	Tyr	Phe	Asp	Tyr	Gln	Thr	Arg	Leu	Pro	Leu	Ser
			100					105					110		
Ser	Pro	Arg	Ser	Glu	Val	Met	Tyr	Leu	Lys	Pro	Ala	Ser	Asn	Asn	Leu
		115					120					125			
Thr	Val	Pro	Gln	Gly	His	Ala	Gly	Cys	His	Thr	Ser	Phe	Thr	Gly	Gln
	130					135					140				
Gly	Thr	Asn	Ala	Ser	Glu	Thr	Pro	Ala	Thr	Arg	Met	Ser	Ile	Ile	Gln
145					150					155					160
Thr	Asp	Asn	Phe	Pro	Ala	Glu	Pro	Asn	Tyr	Met	Gly	Ser	Arg	Gln	Gln
				165					170					175	
Phe	Val	Gln	Ser	Xaa	Ser	Thr	Phe	Lys	Asp	Pro	Glu	Arg	Pro	Ala	
			180					185					190		

&lt;210&gt; 5771

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (95)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5771

Arg	Xaa	Pro	Xaa	Leu	Thr	Lys	Gly	Asn	Lys	Ser	Trp	Ser	Ser	Thr	Ala
1				5					10					15	

Val	Thr	Thr	Ala	Leu	Glu	Leu	Val	Asp	Pro	Pro	Gly	Cys	Arg	Asn	Ser
			20					25					30		

## 5061

Ala Arg Ala Pro Ala Ser Arg Ser Arg Thr Pro Pro Ala Ser Arg Leu  
 35 40 45

Thr Arg Ser Cys Gln Arg Arg Ser Ala Ala Ala Glu Pro Lys Gly Pro  
 50 55 60

Glu Asp Ser Gly Ala Gly Gly Thr Gly Cys Gly Gly Ala Asp Asp Pro  
 65 70 75 80

Ala Lys Lys Lys Lys Gln Arg Arg Gln Arg Thr His Phe Thr Xaa Gln  
 85 90 95

Gln Leu Gln Glu Leu Glu Ala Thr Phe Gln Arg Asn Arg Tyr Pro Asp  
 100 105 110

Met Ser Met Arg Glu Glu Ile Ala Val Trp Thr Asn Leu Thr Glu Pro  
 115 120 125

Arg

<210> 5772

<211> 399

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (208)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (349)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5772

Leu Glu Pro Pro Ala Glu Pro Leu Gln Tyr Leu Ala Cys Tyr Arg Phe  
 1 5 10 15

His Cys Ser His Gln Leu Gly Asp Asn Met Trp Phe Leu Thr Thr Leu  
 20 25 30

Leu Leu Trp Val Pro Val Asp Gly Gln Val Asp Thr Thr Lys Ala Val  
 35 40 45

Ile Thr Leu Gln Pro Pro Trp Val Ser Val Phe Gln Glu Glu Thr Val  
 50 55 60

## 5062

Thr Leu His Cys Glu Val Leu His Leu Pro Gly Ser Ser Ser Thr Gln  
 65 70 75 80  
 Trp Phe Leu Asn Gly Thr Ala Thr Gln Thr Ser Thr Pro Ser Tyr Arg  
 85 90 95  
 Ile Thr Ser Ala Ser Val Asn Asp Ser Gly Glu Tyr Arg Cys Gln Arg  
 100 105 110  
 Gly Leu Ser Gly Arg Ser Asp Pro Ile Gln Leu Glu Ile His Arg Gly  
 115 120 125  
 Trp Leu Leu Leu Gln Val Ser Ser Arg Val Phe Thr Glu Gly Glu Pro  
 130 135 140  
 Leu Ala Leu Arg Cys His Ala Trp Lys Asp Lys Leu Val Tyr Asn Val  
 145 150 155 160  
 Leu Tyr Tyr Arg Asn Gly Lys Ala Phe Lys Phe Phe His Trp Asn Ser  
 165 170 175  
 Asn Leu Thr Ile Leu Lys Thr Asn Ile Ser His Asn Gly Thr Tyr His  
 180 185 190  
 Cys Ser Gly Met Gly Lys His Arg Tyr Thr Ser Ala Gly Ile Ser Xaa  
 195 200 205  
 Thr Val Lys Glu Leu Phe Pro Ala Pro Val Leu Asn Ala Ser Val Thr  
 210 215 220  
 Ser Pro Leu Leu Glu Gly Asn Leu Val Thr Leu Ser Cys Glu Thr Lys  
 225 230 235 240  
 Leu Leu Leu Gln Arg Pro Gly Leu Gln Leu Tyr Phe Ser Phe Tyr Met  
 245 250 255  
 Gly Ser Lys Thr Leu Arg Gly Arg Asn Thr Ser Ser Glu Tyr Gln Ile  
 260 265 270  
 Leu Thr Ala Arg Arg Glu Asp Ser Gly Leu Tyr Trp Cys Glu Ala Ala  
 275 280 285  
 Thr Glu Asp Gly Asn Val Leu Lys Arg Ser Pro Glu Leu Glu Leu Gln  
 290 295 300  
 Val Leu Gly Leu Gln Leu Pro Thr Pro Val Trp Phe His Val Leu Phe  
 305 310 315 320  
 Tyr Leu Ala Val Gly Ile Met Phe Leu Val Asn Thr Val Leu Trp Val  
 325 330 335

## 5063

Thr Ile Arg Lys Glu Leu Lys Arg Lys Lys Lys Trp Xaa Leu Glu Ile  
                   340                  345                  350  
 Ser Leu Asp Ser Gly His Glu Lys Lys Val Ile Ser Ser Leu Gln Glu  
                   355                  360                  365  
 Asp Arg His Leu Glu Glu Glu Leu Lys Cys Gln Glu Gln Lys Glu Glu  
                   370                  375                  380  
 Gln Leu Gln Glu Gly Val His Arg Lys Glu Pro Gln Gly Ala Thr  
                   385                  390                  395

&lt;210&gt; 5773

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (154)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5773

Gly Asp Arg Ala Glu Pro Ser Val Tyr Trp Ala Ala Val Thr Leu Arg  
           1                  5                  10                  15

Phe Gln Met Xaa Met Phe Glu Ser Ala Asp Ser Thr Ala Thr Arg Ser  
                   20                  25                  30

Gly Gln Asp Leu Trp Ala Glu Ile Cys Ser Cys Leu Pro Asn Pro Glu  
                   35                  40                  45

Gln Glu Asp Gly Ala Asn Asn Ala Phe Ser Asp Ser Phe Val Asp Ser  
                   50                  55                  60

Cys Pro Glu Gly Glu Gly Gln Arg Glu Val Ala Asp Phe Ala Val Gln  
                   65                  70                  75                  80

Pro Ala Val Lys Pro Trp Ala Pro Leu Gln Asp Ser Glu Val Tyr Leu  
                   85                  90                  95

Ala Ser Leu Glu Lys Lys Leu Arg Arg Ile Lys Gly Leu Asn Gln Glu  
                   100                  105                  110

## 5064

Val Thr Ser Lys Asp Met Leu Arg Thr Leu Ala Gln Ala Lys Lys Glu  
 115 120 125  
 Cys Trp Asp Arg Phe Leu Gln Glu Lys Leu Ala Ser Glu Phe Phe Val  
 130 135 140  
 Asp Gly Leu Asp Ser Asp Glu Ser Thr Xaa Gly Thr Phe Gln Glu Val  
 145 150 155 160

Ala Pro Ala Arg

<210> 5774  
 <211> 184  
 <212> PRT  
 <213> Homo sapiens

<400> 5774

Lys Met Ala Ser Asn Lys Thr Thr Leu Gln Lys Met Gly Lys Lys Gln  
 1 5 10 15  
 Asn Gly Lys Ser Lys Lys Val Glu Glu Ala Glu Pro Glu Glu Phe Val  
 20 25 30  
 Val Glu Lys Val Leu Asp Arg Arg Val Val Asn Gly Lys Val Glu Tyr  
 35 40 45  
 Phe Leu Lys Trp Lys Gly Phe Thr Asp Ala Asp Asn Thr Trp Glu Pro  
 50 55 60  
 Glu Glu Asn Leu Asp Cys Pro Glu Leu Ile Glu Ala Phe Leu Asn Ser  
 65 70 75 80  
 Gln Lys Ala Gly Lys Glu Lys Asp Gly Thr Lys Arg Lys Ser Leu Ser  
 85 90 95  
 Asp Ser Glu Ser Asp Asp Ser Lys Ser Lys Lys Lys Arg Asp Ala Ala  
 100 105 110  
 Asp Lys Pro Arg Gly Phe Ala Arg Gly Leu Asp Pro Glu Arg Ile Ile  
 115 120 125  
 Gly Ala Thr Asp Ser Ser Gly Glu Leu Met Phe Leu Met Lys Trp Lys  
 130 135 140  
 Asp Ser Asp Glu Ala Asp Leu Val Leu Ala Lys Glu Ala Asn Met Lys  
 145 150 155 160

## 5065

Cys Pro Gln Ile Val Ile Ala Phe Tyr Glu Glu Arg Leu Thr Trp His  
                             165                            170                            175

Ser Cys Pro Glu Asp Glu Ala Gln  
                             180

<210> 5775

<211> 76

<212> PRT

<213> Homo sapiens

<400> 5775

Lys Val Thr Glu Asp Thr Ser Ser Val Leu Arg Ser Pro Met Pro Gly  
       1                            5                            10                            15

Val Val Val Ala Val Ser Val Lys Pro Gly Asp Ala Val Ala Glu Gly  
                             20                            25                            30

Gln Glu Ile Cys Val Ile Glu Ala Met Lys Met Gln Asn Ser Met Thr  
                             35                            40                            45

Ala Gly Lys Thr Gly Thr Val Lys Ser Val His Cys Gln Ala Gly Asp  
                             50                            55                            60

Thr Val Gly Glu Gly Asp Leu Leu Val Glu Leu Glu  
       65                            70                            75

<210> 5776

<211> 57

<212> PRT

<213> Homo sapiens

<400> 5776

Thr Leu Gln Ser Lys Asp Ile Asp Trp Leu Asn Glu Trp Arg Lys Gln  
       1                            5                            10                            15

Asp Pro Leu Ile Cys Cys Leu Gln Glu Thr His Leu Asn Tyr Lys Asp  
                             20                            25                            30

Thr His Arg Leu Lys Val Lys Ser Trp Lys Glu Leu Phe His Ala Asn  
                             35                            40                            45

Gly Asn Gln Glu Lys Glu Lys Glu Tyr  
       50                            55

5066

<210> 5777  
 <211> 277  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (12)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (91)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (125)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5777

Arg	Gln	Lys	Gly	Thr	Ala	Ala	Arg	Arg	Arg	Gln	Xaa	Gly	Leu	Leu	Ala
1				5					10					15	
Ser	Ser	Arg	Pro	Glu	Pro	Ala	Asn	Glu	Arg	Lys	Met	Ala	Asp	Asn	Phe
			20					25					30		
Ser	Leu	His	Asp	Ala	Leu	Ser	Gly	Ser	Gly	Asn	Pro	Asn	Pro	Gln	Gly
		35					40					45			
Trp	Pro	Gly	Ala	Trp	Gly	Asn	Gln	Pro	Ala	Gly	Ala	Gly	Gly	Tyr	Pro
	50					55					60				
Gly	Ala	Ser	Tyr	Pro	Gly	Ala	Tyr	Pro	Gly	Gln	Ala	Pro	Pro	Gly	Ala
65					70					75				80	
Tyr	Pro	Gly	Gln	Ala	Pro	Pro	Gly	Ala	Tyr	Xaa	Gly	Ala	Pro	Gly	Ala
			85						90					95	
Tyr	Pro	Gly	Ala	Pro	Ala	Pro	Gly	Val	Tyr	Pro	Gly	Pro	Pro	Ser	Gly
		100						105					110		
Pro	Gly	Ala	Tyr	Pro	Ser	Ser	Gly	Gln	Pro	Ser	Ala	Xaa	Gly	Ala	Tyr
		115					120					125			
Pro	Ala	Thr	Gly	Pro	Tyr	Gly	Ala	Pro	Ala	Gly	Pro	Leu	Ile	Val	Pro
	130					135					140				
Tyr	Asn	Leu	Pro	Leu	Pro	Gly	Gly	Val	Val	Pro	Arg	Met	Leu	Ile	Thr
145				150					155					160	



## 5067

Ile Leu Gly Thr Val Lys Pro Asn Ala Asn Arg Ile Ala Leu Asp Phe  
                                   165                                  170                                  175

Gln Arg Gly Asn Asp Val Ala Phe His Phe Asn Pro Arg Phe Asn Glu  
                                   180                                  185                                  190

Asn Asn Arg Arg Val Ile Val Cys Asn Thr Lys Leu Asp Asn Asn Trp  
                                   195                                  200                                  205

Gly Arg Glu Glu Arg Gln Ser Val Phe Pro Phe Glu Ser Gly Lys Pro  
                                   210                                  215                                  220

Phe Lys Ile Gln Val Leu Val Glu Pro Asp His Phe Lys Val Ala Val  
                                   225                                  230                                  235                                  240

Asn Asp Ala His Leu Leu Gln Tyr Asn His Arg Val Lys Lys Leu Asn  
                                   245                                  250                                  255

Glu Ile Ser Lys Leu Gly Ile Ser Gly Asp Ile Asp Leu Thr Ser Ala  
                                   260                                  265                                  270

Ser Tyr Thr Met Ile  
                                   275

<210> 5778

<211> 565

<212> PRT

<213> Homo sapiens

<400> 5778

Leu His Cys Thr Met Cys Gly Ile Trp Ala Leu Phe Gly Ser Asp Asp  
   1                                  5                                  10                                  15

Cys Leu Ser Val Gln Cys Leu Ser Ala Met Lys Ile Ala His Arg Gly  
                                   20                                  25                                  30

Pro Asp Ala Phe Arg Phe Glu Asn Val Asn Gly Tyr Thr Asn Cys Cys  
                                   35                                  40                                  45

Phe Gly Phe His Arg Leu Ala Val Val Asp Pro Leu Phe Gly Met Gln  
                                   50                                  55                                  60

Pro Ile Arg Val Lys Lys Tyr Pro Tyr Leu Trp Leu Cys Tyr Asn Gly  
                                   65                                  70                                  75                                  80

Glu Ile Tyr Asn His Lys Lys Met Gln Gln His Phe Glu Phe Glu Tyr  
                                   85                                  90                                  95

Gln Thr Lys Val Asp Gly Glu Ile Ile Leu His Leu Tyr Asp Lys Gly

## 5068

100	105	110
Gly Ile Glu Gln Thr Ile Cys Met Leu Asp Gly Val Phe Ala Phe Val 115 120 125		
Leu Leu Asp Thr Ala Asn Lys Lys Val Phe Leu Gly Arg Asp Thr Tyr 130 135 140		
Gly Val Arg Pro Leu Phe Lys Ala Met Thr Glu Asp Gly Phe Leu Ala 145 150 155 160		
Val Cys Ser Glu Ala Lys Gly Leu Val Thr Leu Lys His Ser Ala Thr 165 170 175		
Pro Phe Leu Lys Val Glu Pro Phe Leu Pro Gly His Tyr Glu Val Leu 180 185 190		
Asp Leu Lys Pro Asn Gly Lys Val Ala Ser Val Glu Met Val Lys Tyr 195 200 205		
His His Cys Arg Asp Glu Pro Leu His Ala Leu Tyr Asp Asn Val Glu 210 215 220		
Lys Leu Phe Pro Gly Phe Glu Ile Glu Thr Val Lys Asn Asn Leu Arg 225 230 235 240		
Ile Leu Phe Asn Asn Ala Val Lys Lys Arg Leu Met Thr Asp Arg Arg 245 250 255		
Ile Gly Cys Leu Leu Ser Gly Gly Leu Asp Ser Ser Leu Val Ala Ala 260 265 270		
Thr Leu Leu Lys Gln Leu Lys Glu Ala Gln Val Gln Tyr Pro Leu Gln 275 280 285		
Thr Phe Ala Ile Gly Met Glu Asp Ser Pro Asp Leu Leu Ala Ala Arg 290 295 300		
Lys Val Ala Asp His Ile Gly Ser Glu His Tyr Glu Val Leu Phe Asn 305 310 315 320		
Ser Glu Glu Gly Ile Gln Ala Leu Asp Glu Val Ile Phe Ser Leu Glu 325 330 335		
Thr Tyr Asp Ile Thr Thr Val Arg Ala Ser Val Gly Met Tyr Leu Ile 340 345 350		
Ser Lys Tyr Ile Arg Lys Asn Thr Asp Ser Val Val Ile Phe Ser Gly 355 360 365		
Glu Gly Ser Asp Glu Leu Thr Gln Gly Tyr Ile Tyr Phe His Lys Ala		

## 5069

370		375		380
Pro Ser Pro Glu Lys Ala Glu Glu Glu Ser Glu Arg Leu Leu Arg Glu				
385		390		395 400
Leu Tyr Leu Phe Asp Val Leu Arg Ala Asp Arg Thr Thr Ala Ala His				
	405		410	415
Gly Leu Glu Leu Arg Val Pro Phe Leu Asp His Arg Phe Ser Ser Tyr				
	420		425	430
Tyr Leu Ser Leu Pro Pro Glu Met Arg Ile Pro Lys Asn Gly Ile Glu				
	435		440	445
Lys His Leu Leu Arg Glu Thr Phe Glu Asp Ser Asn Leu Ile Pro Lys				
	450		455	460
Glu Ile Leu Trp Arg Pro Lys Glu Ala Phe Ser Asp Gly Ile Thr Ser				
	465		470	475 480
Val Lys Asn Ser Trp Phe Lys Ile Leu Gln Glu Tyr Val Glu His Gln				
	485		490	495
Val Asp Asp Ala Met Met Ala Asn Ala Ala Gln Lys Phe Pro Phe Asn				
	500		505	510
Thr Pro Lys Thr Lys Glu Gly Tyr Tyr Tyr Arg Gln Val Phe Glu Arg				
	515		520	525
His Tyr Pro Gly Arg Ala Asp Trp Leu Ser His Tyr Trp Met Pro Lys				
	530		535	540
Trp Ile Asn Ala Thr Asp Pro Ser Ala Arg Thr Leu Thr His Tyr Lys				
	545		550	555 560
Ser Ala Val Lys Ala				
	565			

&lt;210&gt; 5779

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (110)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5779

## 5070

Cys Phe Ala Ser Asp Arg Ile Ser Leu His Arg Asp Leu Gly Pro Asp  
 1 5 10 15  
 Thr Arg Pro Pro Glu Cys Ile Glu Gln Lys Phe Lys Arg Cys Pro Pro  
 20 25 30  
 Leu Pro Thr Thr Ser Val Ile Ile Val Phe His Asn Glu Ala Trp Ser  
 35 40 45  
 Thr Leu Leu Arg Thr Val His Ser Val Leu Tyr Ser Ser Pro Ala Ile  
 50 55 60  
 Leu Leu Lys Glu Ile Ile Leu Val Asp Asp Ala Ser Val Asp Glu Tyr  
 65 70 75 80  
 Leu His Asp Lys Leu Asp Glu Tyr Val Lys Gln Phe Ser Ile Val Lys  
 85 90 95  
 Ile Val Arg Gln Arg Glu Arg Lys Gly Leu Ile Thr Ala Xaa Leu Leu  
 100 105 110  
 Gly Ala Thr Val Ala Thr Ala Glu Thr Leu Thr Phe Leu Asp Ala His  
 115 120 125  
 Cys Glu Cys Phe Tyr Gly Trp Leu Glu Pro Leu Leu Ala Arg Ile Ala  
 130 135 140  
 Glu Asn Tyr Thr Ala Val Val Ser Pro Asp Ile Ala Ser Ile Asp Leu  
 145 150 155 160  
 Asn Thr Phe Glu Phe Asn Lys Pro Ser Pro Tyr Gly Lys  
 165 170

&lt;210&gt; 5780

&lt;211&gt; 49

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5780

Glu Lys Leu Thr Asp Leu Asn Lys Trp Gly Ser Thr Pro Cys Ser Thr  
 1 5 10 15  
 Ile Gly Lys Leu Arg Ile Val Lys Met Ser Phe Leu Pro Lys Leu Ile  
 20 25 30  
 Tyr Lys Ser Gln Lys Thr Phe Phe Leu Gln Thr Leu Ile Lys Val Val  
 35 40 45  
 Phe

5071

<210> 5781  
<211> 63  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (25)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (32)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (33)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (36)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (38)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (41)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (42)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (43)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE

## 5072

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (51)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5781

Ser	Cys	Lys	Lys	Asp	Met	Lys	Asn	Met	Asn	Tyr	Cys	Thr	Ser	His	Cys
1				5					10					15	

Tyr	Phe	His	Val	Gln	Tyr	Ser	Arg	Xaa	Ile	Leu	Thr	Thr	Ile	Asp	Xaa
			20					25					30		

Xaa	Leu	Lys	Xaa	Val	Xaa	Gly	Lys	Xaa	Xaa	Xaa	Ile	Leu	Xaa	Ile	Xaa
		35					40					45			

Ile	Ala	Xaa	Glu	Arg	Arg	Ile	Gln	Gly	Pro	Glu	Xaa	Gly	Ala	Thr	
	50					55					60				

&lt;210&gt; 5782

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (75)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5782

Met	Arg	Arg	Val	Ile	Leu	His	Ser	Pro	Leu	Met	Ser	Gly	Leu	Arg	Val
1				5					10					15	

Ala	Phe	Pro	Asp	Thr	Arg	Lys	Thr	Tyr	Cys	Phe	Asp	Ala	Phe	Pro	Ser
			20					25					30		

Ile	Asp	Lys	Ile	Ser	Lys	Val	Thr	Ser	Pro	Val	Leu	Val	Ile	His	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5073

35                                      40                                      45  
 Thr Glu Asp Glu Val Ile Asp Phe Ser His Gly Leu Ala Met Tyr Glu  
     50                                      55                                      60  
 Arg Cys Pro Arg Ala Val Glu Pro Leu Trp Xaa Glu Gly Ala Gly His  
     65                                      70                                      75                                      80  
 Asn Asp Ile Glu Leu Tyr Ala Gln Tyr Leu Glu Arg Leu Lys Gln Phe  
                                     85                                      90                                      95  
 Ile Ser His Glu Leu Pro Asn Ser  
                                     100

&lt;210&gt; 5783

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5783

Ser Phe Arg Leu Xaa Cys Glu Leu Arg Arg Cys Met Xaa Gly Asn Asn  
     1                                      5                                      10                                      15

Met Ser Thr Pro Leu Pro Ala Ile Val Pro Ala Ala Arg Lys Ala Thr  
                                     20                                      25                                      30

Ala Ala Val Ile Phe Leu His Gly Leu Gly Xaa Thr Gly Pro Val Arg  
                                     35                                      40                                      45

Pro Val Thr Leu Asn Met Asn Val Ala Met Pro Ser Trp Phe Asp Ile  
     50                                      55                                      60

Ile Gly Leu Ser Pro Asp Ser Gln Glu Asp Glu Ser Gly Ile Lys Gln  
     65                                      70                                      75                                      80

5074

Ala Ala Glu Asn Ile Lys Ala Leu Ile Asp Gln Glu Val Lys Asn Gly  
                             85                            90                            95  
 Ile Pro Ser Asn Arg Ile Ile Leu Gly Gly Phe Ser Gln Gly Gly Ala  
                             100                            105                            110  
 Leu Ser Leu Tyr Thr Ala Leu Thr Thr Gln Gln Lys Leu Ala Gly Val  
                             115                            120                            125  
 Thr Ala Leu Ser Cys Trp Leu Pro Leu Arg Ala Ser Phe Pro Gln Gly  
                             130                            135                            140  
 Pro Ile Gly Gly Ala Asn Arg Asp Ile Ser Ile Leu Gln Cys His Gly  
 145                            150                            155                            160  
 Asp Cys Asp Pro Leu Val Pro Leu Met Phe Gly Ser Leu Thr Val Glu  
                             165                            170                            175  
 Lys Leu Lys Thr Leu Val Asn Pro Ala Asn Val Thr Phe Lys Thr Tyr  
                             180                            185                            190  
 Glu Gly Met Met His Ser Ser Cys Gln Gln Glu Met Met Asp Val Lys  
                             195                            200                            205  
 Gln Phe Ile Asp Lys Leu Leu Pro Pro Ile Asp  
                             210                            215

&lt;210&gt; 5784

&lt;211&gt; 326

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (123)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (136)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5784

Pro Arg His Gly Gln His His Arg Glu Gln Gly Asp Thr Ala Ile Leu  
   1                            5                            10                            15  
 Arg Cys Val Val Glu Asp Lys Asn Ser Lys Val Ala Trp Leu Asn Arg  
                             20                            25                            30



## 5075

Ser Gly Ile Ile Phe Ala Gly His Asp Lys Trp Ser Leu Asp Pro Arg  
 35 40 45  
 Val Glu Leu Glu Lys Arg His Ser Leu Glu Tyr Ser Leu Arg Ile Gln  
 50 55 60  
 Lys Val Asp Val Tyr Asp Glu Gly Ser Tyr Thr Cys Ser Val Gln Thr  
 65 70 75 80  
 Gln His Glu Pro Lys Thr Ser Gln Val Tyr Leu Ile Val Gln Val Pro  
 85 90 95  
 Pro Lys Ile Ser Asn Ile Ser Ser Asp Val Thr Val Asn Glu Gly Ser  
 100 105 110  
 Asn Val Thr Leu Val Cys Met Ala Asn Gly Xaa Pro Glu Pro Val Ile  
 115 120 125  
 Thr Trp Arg His Leu Thr Pro Xaa Gly Arg Glu Phe Glu Gly Glu Glu  
 130 135 140  
 Glu Tyr Leu Glu Ile Leu Gly Ile Thr Arg Glu Gln Ser Gly Lys Tyr  
 145 150 155 160  
 Glu Cys Lys Ala Ala Asn Glu Val Ser Ser Ala Asp Val Lys Gln Val  
 165 170 175  
 Lys Val Thr Val Asn Tyr Pro Pro Thr Ile Thr Glu Ser Lys Ser Asn  
 180 185 190  
 Glu Ala Thr Thr Gly Arg Gln Ala Ser Leu Lys Cys Glu Ala Ser Ala  
 195 200 205  
 Val Pro Ala Pro Asp Phe Glu Trp Tyr Arg Asp Asp Thr Arg Ile Asn  
 210 215 220  
 Ser Ala Asn Gly Leu Glu Ile Lys Ser Thr Glu Gly Gln Ser Ser Leu  
 225 230 235 240  
 Thr Val Thr Asn Val Thr Glu Glu His Tyr Gly Asn Tyr Thr Cys Val  
 245 250 255  
 Ala Ala Asn Lys Leu Gly Val Thr Asn Ala Ser Leu Val Leu Phe Lys  
 260 265 270  
 Arg Val Leu Pro Thr Ile Pro His Pro Ile Gln Glu Ile Gly Thr Thr  
 275 280 285  
 Val His Phe Lys Gln Lys Gly Pro Gly Ser Val Arg Gly Ile Asn Gly  
 290 295 300

5076

Ser Ile Ser Leu Ala Val Pro Leu Trp Leu Leu Ala Ala Ser Leu Leu  
 305 310 315 320

Cys Leu Leu Ser Lys Cys  
 325

<210> 5785  
 <211> 217  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (76)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (191)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (208)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (213)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5785  
 Pro Thr Arg Pro Ala Glu Lys Asp Pro Gly Arg Ser Ala Pro Gly Ala  
 1 5 10 15

Ala Ser Ala Ala Ala Ala Leu Lys Gln Leu Gly Asp Ser Pro Ala Glu  
 20 25 30

Asp Lys Ser Ser Phe Lys Pro Tyr Ser Lys Gly Ser Gly Gly Gly Asp  
 35 40 45

Ser Arg Lys Asp Ser Gly Ser Ser Ser Val Ser Ser Thr Ser Ser Ser  
 50 55 60

Ser Ser Ser Ser Pro Gly Asp Lys Ala Gly Phe Xaa Val Pro Ser Ala  
 65 70 75 80

Ala Cys Pro Pro Phe Pro Pro His Gly Ala Pro Val Ser Ala Ser Ser

## 5077

85										90					95				
Ser	Ser	Ser	Ser	Pro	Gly	Gly	Ser	Arg	Gly	Gly	Ser	Pro	His	His	Ser				
				100				105					110						
Asp	Cys	Lys	Asn	Gly	Gly	Gly	Val	Gly	Gly	Gly	Glu	Leu	Asp	Lys	Lys				
		115					120					125							
Asp	Gln	Glu	Pro	Lys	Pro	Ser	Pro	Glu	Pro	Ala	Ala	Val	Ser	Arg	Gly				
		130				135					140								
Gly	Gly	Gly	Glu	Pro	Gly	Ala	His	Gly	Gly	Ala	Glu	Ser	Gly	Ala	Ser				
145					150					155					160				
Gly	Arg	Lys	Ser	Glu	Pro	Pro	Ser	Ala	Leu	Val	Gly	Ala	Gly	His	Val				
				165					170					175					
Ala	Pro	Val	Ser	Pro	Thr	Ser	Arg	Ala	Thr	Arg	Cys	Ser	Arg	Xaa	Arg				
			180					185					190						
Leu	Gln	His	Trp	Leu	Pro	Arg	Leu	His	Arg	Gly	Arg	Leu	Arg	Arg	Xaa				
		195					200					205							
Pro	Val	Leu	Ile	Xaa	Ala	Trp	Pro	Gly											
		210				215													

&lt;210&gt; 5786

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5786

Pro	Gln	Lys	Lys	Tyr	Phe	Met	Trp	Val	Phe	Cys	Phe	Ser	Leu	Leu	Asp			
1					5				10				15					
Phe	Met	Asp	Glu	Gly	Ile	Trp	Leu	Thr	Phe	Tyr	Phe	Leu	Met	Glu	Gln			
		20					25					30						
Pro	Val	Phe	Val	Asn	Tyr	Ser	Leu	Val	Asn	Cys	Glu	Ile	Leu	Asn	Ser			
		35					40					45						
Leu	Pro	Ala	Ile	Leu	Val	Leu	Val	Ser	Gly	Gln	Ile	Tyr	Ala	Val	Val			
	50					55					60							
Leu	Met	Arg	Leu	Val														
																65		

5078

<210> 5787  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 5787

His	Cys	Ser	Glu	Gly	His	Ala	Lys	Ser	Arg	His	Arg	Ser	Trp	Gln	Gln
1				5					10					15	
Glu	Gly	Asp	Arg	Ala	Ser	Pro	Arg	His	Thr	Ser	Pro	Gly	Gly	Asp	Ser
			20					25					30		
Gly	Lys	Glu	Pro	Arg	Thr	Gly	Lys	Asp	Trp	Val	Gly	Glu	Gly	Val	Arg
	35						40					45			
Gly	Leu	Val	Val	Thr	Gln	Ser	Trp	Arg	Gly	Ala	Lys	Ser	Thr	Gly	Gly
	50					55					60				
Tyr	Pro	Leu	Ala	Ala	Ser	Ala	Leu	Ala	Val	Cys	Pro	Phe	Met	Ser	Gln
65					70					75					80
Thr	Ala	Thr	Thr	Met	Tyr	Leu	Gln	Trp	Gly	Cys	Arg	Asp	Gly	Gly	Asp
				85					90					95	
Ser	Ser	Leu	Thr	Pro	Gln	Glu	Leu	Pro	Gly	Pro	Lys	Glu	Glu	Asn	Ala
			100					105					110		
Ala	Ser	Phe	Gln	Ser	Gly	Leu	His	Pro	Leu	Ser	Gly	Ser	Leu	Ser	Ala
	115						120					125			
Ser	Cys	Asn	Ser	Gly	Cys	Phe	Ser	Arg	Leu	Ser	Ser	Asn	Ser	Ala	Pro
	130					135					140				
Pro															
145															

<210> 5788  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 5788

Leu	Arg	Arg	Pro	Phe	Leu	Met	Leu	Leu	Leu	Asp	Leu	Met	Ser	Ser	Pro
1				5					10					15	
Ser	Pro	Gln	Leu	Leu	Val	Ala	Ala	Ala	Gln	Gln	Thr	Leu	Gly	Met	Gly
			20					25					30		
Lys	Arg	Arg	Ser	Pro	Pro	Gln	Ala	Ile	Cys	Leu	His	Leu	Ala	Gly	Glu

5079

35                                      40                                      45  
 Val Leu Ala Val Ala Arg Gly Leu Lys Pro Ala Val Leu Tyr Asp Cys  
     50                                      55                                      60  
 Asn Cys Ala Gly Ala Ser Glu Leu Gln Ser Tyr Leu Glu Glu Leu Lys  
     65                                      70                                      75                                      80  
 Gly Leu Gly Phe Leu Thr Phe Gly Leu His Ile Leu Glu Ile Gly Glu  
                                     85                                      90                                      95  
 Asn Ser Leu Ile Val Ser Pro Glu His Val Cys Gln His Leu Glu Gln  
                                     100                                      105                                      110  
 Val

<210> 5789  
 <211> 32  
 <212> PRT  
 <213> Homo sapiens

<400> 5789  
 Lys Phe Ser Gln Ala Trp Trp His Met Pro Ile Val Pro Ala Ile Trp  
     1                                      5                                      10                                      15  
 Val Ala Lys Val Gly Glu Leu Leu Glu Pro Gly Arg Ser Arg Leu Gln  
                                     20                                      25                                      30

<210> 5790  
 <211> 67  
 <212> PRT  
 <213> Homo sapiens

<400> 5790  
 Val Tyr Lys Met Phe Ser Met Arg Asn Gln Glu Thr Tyr Thr Gly Leu  
     1                                      5                                      10                                      15  
 Thr Val Val Ser Tyr Met Ser Pro Gln Phe Gln Cys Ala Cys Ser Leu  
                                     20                                      25                                      30  
 Thr Ser Pro Phe Pro Asn Pro Ser Leu Leu Gly Cys Cys Phe Lys Val  
                                     35                                      40                                      45

## 5080

Cys Pro Ser Pro Asn Leu Asp Phe Tyr Tyr Arg Ser Lys Ala Leu Ser  
 50 55 60

Ile Leu Tyr  
 65

<210> 5791

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5791

Trp Leu Leu Cys Pro Val Arg Val Phe Ser Ser Leu Thr Trp Val His  
 1 5 10 15

Phe Leu Met Ala His Met Lys Phe Gly Ser Tyr Gly Leu Thr Leu Ala  
 20 25 30

Met Val Leu Ser Tyr Gly Glu Gln His Gln Arg Pro Val Thr Cys Lys  
 35 40 45

Leu Lys Ile Gln Cys Gln Gly Pro Ser Pro Ala Pro Leu Ile Glu Asn  
 50 55 60

Leu Leu Ala Ile Cys Ile Phe Arg Cys Ser Arg Leu Val  
 65 70 75

<210> 5792

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5792

Tyr Val Tyr Leu Ile Ile Leu Pro Leu Ala Lys Cys Tyr Val Cys Lys  
 1 5 10 15

Met Trp His Leu Leu Val Phe Ile Val Cys Val Phe Phe Val Tyr Tyr  
 20 25 30

Thr Leu Gly Asn Phe Val Leu Pro Lys Lys Lys Lys Lys Arg Lys Cys  
 35 40 45

Asn Val Arg His Thr Arg Lys Ala Asn Gln Cys Cys Lys Leu Lys Val  
 50 55 60

Gln Phe Gln Arg Ser Leu Pro Thr Ala Gly Phe Phe Leu Tyr Phe Lys  
 65 70 75 80

## 5081

Asn Ile Met Leu His Ile Ile Ala Ile Phe Ile Phe Trp Gly Phe Ala  
                             85                            90                            95

Thr Leu Ile Gln Trp Asn Gln Trp Lys Cys His Pro Ala Thr Glu Leu  
                             100                            105                            110

Pro Leu Leu Tyr Leu Lys Ser Phe  
                             115                            120

&lt;210&gt; 5793

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (42)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (66)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (74)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (82)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5793

Leu Leu Gly Ser Cys Leu Gln Glu Ala Met Thr Leu Asn Ser Glu Pro  
   1                            5                            10                            15

Tyr Ser Val Leu Thr Ser Gly Ser His Val Phe Leu Cys Gln Val Ile  
                             20                            25                            30

Lys Tyr Leu Val Leu Val Phe Cys Leu Xaa Pro Lys Leu Pro Leu Trp  
                             35                            40                            45

Val His Arg Arg Leu Gly Ser Ile Val Arg Met Ala Ile Arg Glu Tyr  
                             50                            55                            60

Lys Xaa Gly Phe Ser Arg Ala Trp Glu Xaa Ile Leu Glu Pro Arg Arg

```

65                               70                               75                               80
Ala Xaa Pro Ala Leu Arg Ser Phe Gly Val Glu Met Gln Pro Trp Glu
      85                               90                               95
Ile Trp Gly Val Ser Arg Pro Val
      100

```

```

<400> 5794
Asp Leu Lys Arg Lys Ser Lys Ser Phe Tyr Tyr Asp Xaa Ile Pro Val
 1               5               10               15
-----
Glu Tyr Leu Lys Gly Thr Pro His Leu Asn Asn Gln Cys Lys Tyr Phe
      20               25               30
-----
Leu Ser Lys Leu
      35

```

BNSDOCID: &lt;WO\_\_0122920A2\_1 &gt;



## 5083

65		70		75		80									
Asp	Ala	Val	Leu	Leu	Glu	Pro	Trp	Arg	Lys	Met	Glu	Leu	Val	Leu	Gln
			85						90					95	

&lt;210&gt; 5796

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (26)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (30)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (33)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (37)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5796

Phe	Gly	Gly	Ala	Tyr	Asp	Gly	Lys	Tyr	Glu	Lys	Thr	Leu	Tyr	Gly	His
1				5					10					15	

Asn	Leu	Glu	Ile	Ser	Asp	Val	Ala	Trp	Xaa	Ser	Asp	Ser	Xaa	Arg	Leu
			20					25					30		

Xaa	Ser	Ala	Xaa	Xaa	Asp	Lys	Thr	Leu	Lys	Leu	Trp	Asp	Val	Arg	Ser
			35				40					45			

Gly	Lys	Cys	Leu	Lys	Thr	Leu	Lys	Gly	His	Ser	Asn	Tyr	Val	Phe	Cys
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5084

50		55		60											
Cys	Asn	Phe	Asn	Pro	Pro	Ser	Asn	Leu	Ile	Ile	Ser	Gly	Ser	Phe	Asp
65					70					75					80
Glu	Thr	Val	Lys	Ile	Trp	Glu	Val	Lys	Thr	Gly	Lys	Cys	Leu	Lys	Thr
			85						90					95	
Leu	Ser	Ala	His	Ser	Asp	Pro	Val	Ser	Ala	Val	His	Phe	Asn	Cys	Ser
			100					105					110		
Gly	Ser	Leu	Ile	Val	Ser	Gly	Ser	Tyr	Asp	Gly	Leu	Cys	Arg	Ile	Trp
		115					120					125			
Asp	Ala	Ala	Ser	Gly	Gln	Cys	Leu	Lys	Thr	Leu	Val	Asp	Asp	Asp	Asn
	130					135					140				
Pro	Pro	Val	Ser	Phe	Val	Lys	Phe	Ser	Pro	Asn	Gly	Lys	Tyr	Ile	Leu
145					150					155					160
Thr	Ala	Thr	Leu	Asp	Asn	Thr	Leu	Lys	Leu	Trp	Asp	Tyr	Ser	Arg	Gly
			165						170					175	
Arg	Cys	Leu	Lys	Thr	Tyr	Thr	Gly	His	Lys	Asn	Glu	Lys	Tyr	Cys	Ile
			180					185					190		
Phe	Ala	Asn	Phe	Ser	Val	Thr	Gly	Gly	Lys	Trp	Ile	Val	Ser	Gly	Ser
		195					200					205			
Glu	Asp	Asn	Arg	Val	Tyr	Ile	Trp	Glu	Pro	Ser	Asp				
	210					215					220				

&lt;210&gt; 5797

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (88)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

## 5085

&lt;222&gt; (101)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5797

Asp Pro Arg Val Arg Thr Arg Xaa Pro Asn Met Tyr Gln Val Val Leu  
 1 5 10 15

Leu Phe Val Val Val Pro Glu Leu Gln Glu His Gln Ser Lys Pro Ser  
 20 25 30

Arg Pro Ser Pro Arg Val Ala Asp Asn Pro Glu Glu Gly Arg Glu Pro  
 35 40 45

His Asn Asp Arg Pro Val Ser Met Ala Phe Gly Cys Gln Pro Glu His  
 50 55 60

Val Tyr Ala Glu Cys Gly Lys Thr Tyr Arg Pro Pro Pro Thr Pro Lys  
 65 70 75 80

Leu Phe Pro Gln Ser Thr Val Xaa Asn Thr Thr Pro Ser Phe Thr Ser  
 85 90 95

Gly Thr Gln Glu Xaa Leu Phe Val Phe Leu Ile Ser Ile Ser Arg Arg  
 100 105 110

Leu Phe Ser Thr Pro Leu Phe Leu Pro Pro Gln Phe Ala Ile Pro Leu  
 115 120 125

Leu Ala Leu  
 130

&lt;210&gt; 5798

&lt;211&gt; 239

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5798

Gln Pro Pro Gly Thr Arg Asp Pro Ala Pro Pro Leu Ile Thr Pro Ala  
 1 5 10 15

Thr Pro Gln Leu Ser Ala Ala Pro Asp Ala Met Asp Pro Ala Leu Ala  
 20 25 30

Ala Gln Met Ser Glu Ala Val Ala Glu Lys Met Leu Gln Tyr Arg Arg  
 35 40 45

Asp Thr Ala Gly Trp Lys Ile Cys Arg Glu Gly Asn Gly Val Ser Val  
 50 55 60

## 5086

Ser Trp Arg Pro Ser Val Glu Phe Pro Gly Asn Leu Tyr Arg Gly Glu  
 65 70 75 80  
 Gly Ile Val Tyr Gly Thr Leu Glu Glu Val Trp Asp Cys Val Lys Pro  
 85 90 95  
 Ala Val Gly Gly Leu Arg Val Lys Trp Asp Glu Asn Val Thr Gly Phe  
 100 105 110  
 Glu Ile Ile Gln Ser Ile Thr Asp Thr Leu Cys Val Ser Arg Thr Ser  
 115 120 125  
 Thr Pro Ser Ala Ala Met Lys Leu Ile Ser Pro Arg Asp Phe Val Asp  
 130 135 140  
 Leu Val Leu Val Lys Arg Tyr Glu Asp Gly Thr Ile Ser Ser Asn Ala  
 145 150 155 160  
 Thr His Val Glu His Pro Leu Cys Pro Pro Lys Pro Gly Phe Val Arg  
 165 170 175  
 Gly Phe Asn His Pro Cys Gly Cys Phe Cys Glu Pro Leu Pro Gly Glu  
 180 185 190  
 Pro Thr Lys Thr Asn Leu Val Thr Phe Phe His Thr Asp Leu Ser Gly  
 195 200 205  
 Tyr Leu Pro Gln Asn Val Val Asp Ser Phe Phe Pro Arg Ser Met Thr  
 210 215 220  
 Arg Phe Tyr Ala Asn Leu Gln Lys Ala Val Lys Gln Phe His Glu  
 225 230 235

&lt;210&gt; 5799

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5799

Ala Tyr Thr Thr Met Thr Glu Asn Lys Arg Leu Phe Phe Glu Thr Pro  
 1 5 10 15  
 Ser Gln Lys Gln Asn Lys Thr Lys Lys Leu Asp Lys Cys Tyr Ile Asn  
 20 25 30  
 Val Trp Val Val Arg Phe Tyr Phe Glu Ser Glu Val Cys Arg Tyr Ala  
 35 40 45  
 Tyr Arg Phe Leu Glu Phe Thr Thr Phe Leu Phe Cys Ile Ile Asn Val

5087

50

55

60

Ile Phe

65

&lt;210&gt; 5800

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (55)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (62)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (164)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (165)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (166)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (168)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5800

Arg	His	Glu	Asp	Phe	Thr	Asp	Thr	Ala	Tyr	Leu	Phe	Lys	Ile	Gln	Ile
1				5					10					15	

Glu	Ser	Leu	Asn	Asp	Lys	Leu	Gln	Asn	Ala	Lys	Glu	Gln	Leu	Arg	Glu
			20					25					30		

Lys	Glu	Phe	Ile	Met	Leu	Gln	Asn	Glu	Gln	Glu	Ile	Ser	Gln	Leu	Lys
								35			40			45	

5088

Lys Glu Ile Glu Arg Thr Xaa Gln Arg Met Lys Glu Met Xaa Ser Val  
 50 55 60

Met Lys Glu Gln Glu Gln Tyr Ile Ala Thr Gln Tyr Lys Glu Ala Ile  
 65 70 75 80

Asp Leu Gly Gln Glu Leu Arg Leu Thr Arg Glu Gln Val Gln Asn Ser  
 85 90 95

His Thr Glu Leu Ala Glu Ala Arg His Gln Gln Val Gln Ala Gln Arg  
 100 105 110

Glu Ile Glu Arg Leu Ser Ser Glu Leu Glu Asp Met Lys Gln Leu Ser  
 115 120 125

Lys Glu Lys Asp Ala His Gly Asn His Leu Ala Glu Glu Leu Gly Ala  
 130 135 140

Ser Lys Gly Arg Glu Ala Tyr Leu Glu Ala Arg Met Gln Ala Glu Ile  
 145 150 155 160

Lys Lys Leu Xaa Xaa Xaa Val Xaa Ile Ser Ser Lys Lys  
 165 170

&lt;210&gt; 5801

&lt;211&gt; 719

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (302)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5801

Phe Lys Val Ile Phe Leu Leu Gln Asp Gly Ile Val Asn Pro Thr Ile  
 1 5 10 15

Arg Lys Asp Leu Lys Thr Gly Pro Lys Phe Tyr Cys Cys Pro Ile Glu  
 20 25 30

Gly Cys Pro Arg Gly Pro Glu Arg Pro Phe Ser Gln Phe Ser Leu Val  
 35 40 45

Lys Gln His Phe Met Lys Met His Ala Glu Lys Lys His Lys Cys Ser  
 50 55 60

Lys Cys Ser Asn Ser Tyr Gly Thr Glu Trp Asp Leu Lys Arg His Ala

## 5089

65		70		75		80
Glu Asp Cys Gly Lys Thr Phe Arg Cys Thr Cys Gly Cys Pro Tyr Ala						
	85		90		95	
Ser Arg Thr Ala Leu Gln Ser His Ile Tyr Arg Thr Gly His Glu Ile						
	100		105		110	
Pro Ala Glu His Arg Asp Pro Pro Ser Lys Lys Arg Lys Met Glu Asn						
	115		120		125	
Cys Ala Gln Asn Gln Lys Leu Ser Asn Lys Thr Ile Glu Ser Leu Asn						
	130		135		140	
Asn Gln Pro Ile Pro Arg Pro Asp Thr Gln Glu Leu Glu Ala Ser Glu						
	145		150		155	160
Ile Lys Leu Glu Pro Ser Phe Glu Asp Ser Cys Gly Ser Asn Thr Asp						
	165		170		175	
Lys Gln Thr Leu Thr Thr Pro Pro Arg Tyr Pro Gln Lys Leu Leu Leu						
	180		185		190	
Pro Lys Pro Lys Val Ala Leu Val Lys Leu Pro Val Met Gln Phe Ser						
	195		200		205	
Val Met Pro Val Phe Val Pro Thr Ala Asp Ser Ser Ala Gln Pro Val						
	210		215		220	
Val Leu Gly Val Asp Gln Gly Ser Ala Thr Gly Ala Val His Leu Met						
	225		230		235	240
Pro Leu Ser Val Gly Thr Leu Ile Leu Gly Leu Asp Ser Glu Ala Cys						
	245		250		255	
Ser Leu Lys Glu Ser Leu Pro Leu Phe Lys Ile Ala Asn Pro Ile Ala						
	260		265		270	
Gly Glu Pro Ile Ser Thr Gly Val Gln Val Asn Phe Gly Lys Ser Pro						
	275		280		285	
Ser Asn Pro Leu Gln Glu Leu Gly Asn Thr Cys Gln Lys Xaa Ser Ile						
	290		295		300	
Ser Ser Ile Asn Val Gln Thr Asp Leu Ser Tyr Ala Ser Gln Asn Phe						
	305		310		315	320
Ile Pro Ser Ala Gln Trp Ala Thr Ala Asp Ser Ser Val Ser Ser Cys						
	325		330		335	
Ser Gln Thr Asp Leu Ser Phe Asp Ser Gln Val Ser Leu Pro Ile Ser						

## 5090

340	345	350
Val His Thr Gln Thr Phe Leu Pro Ser Ser Lys Val Thr Ser Ser Ile		
355	360	365
Ala Ala Gln Thr Asp Ala Phe Met Asp Thr Cys Phe Gln Ser Gly Gly		
370	375	380
Val Ser Arg Glu Thr Gln Thr Ser Gly Ile Glu Ser Pro Thr Asp Asp		
385	390	395 400
His Val Gln Met Asp Gln Ala Gly Met Cys Gly Asp Ile Phe Glu Ser		
	405	410 415
Val His Ser Ser Tyr Asn Val Ala Thr Gly Asn Ile Ile Ser Asn Ser		
	420	425 430
Leu Val Ala Glu Thr Val Thr His Ser Leu Leu Pro Gln Asn Glu Pro		
	435	440 445
Lys Thr Leu Asn Gln Asp Ile Glu Lys Ser Ala Pro Ile Ile Asn Phe		
	450	455 460
Ser Ala Gln Asn Ser Met Leu Pro Ser Gln Asn Met Thr Asp Asn Gln		
465	470	475 480
Thr Gln Thr Ile Asp Leu Leu Ser Asp Leu Glu Asn Ile Leu Ser Ser		
	485	490 495
Asn Leu Pro Ala Gln Thr Leu Asp His Arg Ser Leu Leu Ser Asp Thr		
	500	505 510
Asn Pro Gly Pro Asp Thr Gln Leu Pro Ser Gly Pro Ala Gln Asn Pro		
	515	520 525
Gly Ile Asp Phe Asp Ile Glu Glu Phe Phe Ser Ala Ser Asn Ile Gln		
	530	535 540
Thr Gln Thr Glu Glu Ser Glu Leu Ser Thr Met Thr Thr Glu Pro Val		
545	550	555 560
Leu Glu Ser Leu Asp Ile Glu Thr Gln Thr Asp Phe Leu Leu Ala Asp		
	565	570 575
Thr Ser Ala Gln Ser Tyr Gly Cys Arg Gly Asn Ser Asn Phe Leu Gly		
	580	585 590
Leu Glu Met Phe Asp Thr Gln Thr Gln Thr Asp Leu Asn Phe Phe Leu		
	595	600 605
Asp Ser Ser Pro His Leu Pro Leu Gly Ser Ile Leu Lys His Ser Ser		



## 5091

610	615	620
Phe Ser Val Ser Thr Asp Ser Ser Asp Thr Glu Thr Gln Thr Glu Gly		
625	630	635 640
Val Ser Thr Ala Lys Asn Ile Pro Ala Leu Glu Ser Lys Val Gln Leu		
	645	650 655
Asn Ser Thr Glu Thr Gln Thr Met Ser Ser Gly Phe Glu Thr Leu Gly		
	660	665 670
Ser Leu Phe Phe Thr Ser Asn Glu Thr Gln Thr Ala Met Asp Asp Phe		
	675	680 685
Leu Leu Ala Asp Leu Ala Trp Asn Thr Met Glu Ser Gln Phe Ser Ser		
	690	700
Val Glu Thr Gln Thr Ser Ala Glu Pro His Thr Val Ser Asn Phe		
705	710	715

&lt;210&gt; 5802

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (50)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5802

Asn Ser Xaa Met Gln Xaa Pro Glu Trp His Phe Ala Thr Leu Ser His

1

5

10

15

## 5092

Ala Leu Ile Ala Phe Gln Asn Glu Ser Tyr Leu Arg Gln Leu Leu Trp  
                   20                                  25                                  30

Val Lys Ser Xaa Leu Tyr Ser Arg Val Arg Leu Leu Gly Val Cys Leu  
                   35                                  40                                  45

Tyr Xaa Lys Arg Gly Gly Leu Ser  
                   50                                  55

&lt;210&gt; 5803

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5803

Ser Val Ala Cys Lys Glu Lys Lys Met Ala Ser Asp Ile Trp Tyr Lys  
   1                                  5                                  10                                  15

Leu Leu Asn Arg Ile Ile Arg Ala Ser Phe Val Lys Pro Ala Phe Lys  
                                   20                                  25                                  30

Cys Trp Thr Ala Ser Lys Ser Val Cys Phe Xaa Ser Ser Val Pro Tyr  
                   35                                  40                                  45

Thr Lys Lys Gln Leu Leu Pro Ser Tyr Tyr Ile Cys  
                   50                                  55                                  60

&lt;210&gt; 5804

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5804

Phe Thr Gln Tyr Gly Ala Ala Cys Phe Cys Asp Phe Lys Ile Asp Gln  
   1                                  5                                  10                                  15

Gly Thr Phe Ala Phe Glu Glu Arg Asn Phe Leu Gly Leu Val Thr Arg  
                   20                                  25                                  30

Ala Val Asp Val Pro Lys Ser Lys Asp Val Cys Cys Pro Trp Val Ser  
                   35                                  40                                  45

## 5093

His Cys Arg Phe Ile Thr Trp  
 50 55

<210> 5805

<211> 367

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (358)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5805

Ala Arg Gln Thr Gly Leu Glu Asp Pro Leu Arg Leu Arg Arg Ala Glu  
 1 5 10 15

Ser Thr Arg Arg Val Leu Gly Leu Glu Leu Asn Lys Asp Arg Asp Val  
 20 25 30

Glu Arg Ile His Gly Gly Gly Ile Asn Thr Leu Asp Ile Glu Pro Val  
 35 40 45

Glu Gly Arg Tyr Met Leu Ser Gly Gly Ser Asp Gly Val Ile Val Leu  
 50 55 60

Tyr Asp Leu Glu Asn Ser Ser Arg Gln Ser Tyr Tyr Thr Cys Lys Ala  
 65 70 75 80

Val Cys Ser Ile Gly Arg Asp His Pro Asp Val His Arg Tyr Ser Val  
 85 90 95

Glu Thr Val Gln Trp Tyr Pro His Asp Thr Gly Met Phe Thr Ser Ser  
 100 105 110

Ser Phe Asp Lys Thr Leu Lys Val Trp Asp Thr Asn Thr Leu Gln Thr  
 115 120 125

Ala Asp Val Phe Asn Phe Glu Glu Thr Val Tyr Ser His His Met Ser  
 130 135 140

Pro Val Ser Thr Lys His Cys Leu Val Ala Val Gly Thr Arg Gly Pro  
 145 150 155 160

Lys Val Gln Leu Cys Asp Leu Lys Ser Gly Ser Cys Ser His Ile Leu  
 165 170 175

Gln Gly His Arg Gln Glu Ile Leu Ala Val Ser Trp Ser Pro Arg Tyr  
 180 185 190

## 5094

Asp Tyr Ile Leu Ala Thr Ala Ser Ala Asp Ser Arg Val Lys Leu Trp  
 195 200 205  
 Asp Val Arg Arg Ala Ser Gly Cys Leu Ile Thr Leu Asp Gln His Asn  
 210 215 220  
 Gly Lys Lys Ser Gln Ala Val Glu Ser Ala Asn Thr Ala His Asn Gly  
 225 230 235 240  
 Lys Val Asn Gly Leu Cys Phe Thr Ser Asp Gly Leu His Leu Leu Thr  
 245 250 255  
 Val Gly Thr Asp Asn Arg Met Arg Leu Trp Asn Ser Ser Asn Gly Glu  
 260 265 270  
 Asn Thr Leu Val Asn Tyr Gly Lys Val Cys Asn Asn Ser Lys Lys Gly  
 275 280 285  
 Leu Lys Phe Thr Val Ser Cys Gly Cys Ser Ser Glu Phe Val Phe Val  
 290 295 300  
 Pro Tyr Gly Ser Thr Ile Ala Val Tyr Thr Val Tyr Ser Gly Glu Gln  
 305 310 315 320  
 Ile Thr Met Leu Lys Gly His Tyr Lys Thr Val Asp Cys Cys Val Phe  
 325 330 335  
 Gln Ser Asn Phe Gln Val Leu Tyr Ser Gly Ser Arg Asp Cys Asn Ile  
 340 345 350  
 Leu Ala Trp Val Pro Xaa Leu Tyr Glu Pro Val Pro Asp Asp Gly  
 355 360 365

&lt;210&gt; 5806

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (28)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

## 5095

<220>  
 <221> SITE  
 <222> (51)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (68)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5806  
 Lys Lys Xaa Gly Leu Asn Arg Pro Pro Phe Gly Ala Gln Arg Arg Val  
 1 5 10 15  
 Leu Thr Pro Arg Gly Gly Phe Pro Pro Gly Gly Xaa Lys Ile Phe Ser  
 20 25 30  
 Pro Pro Pro Gly Gly Gly Phe Pro Gly Lys Pro Pro Pro Lys Thr Gly  
 35 40 45  
 Ala Arg Xaa Phe Pro Pro Gly Gly Gly Pro Phe Pro Lys Phe Phe Phe  
 50 55 60  
 Ala Gln Asn Xaa Ser Gln Lys Ile  
 65 70

<210> 5807  
 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (45)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5807  
 His Gly Val Arg Arg Arg Leu Arg Val Thr Arg Gln Arg Ala Thr Ala  
 1 5 10 15  
 Leu Val Gln Ser Ala Arg Val Arg Arg Trp Lys Arg Ser Arg Arg Asn  
 20 25 30  
 Pro Gln Ile Ala Pro Phe Pro Arg Asp Leu Ser Gly Xaa Arg Ala Thr  
 35 40 45  
 Ala Gln Pro Arg Ala Pro Ala Leu Arg Pro Arg His Thr Pro Gln Ser  
 50 55 60

## 5096

Ser Ser Ser Gly Ser Ala Pro Thr Pro Arg Arg Asp Gln Pro Ala Arg  
65 70 75 80

Gly Gly Leu Thr Ala Pro Ser Ser Gln Glu Gly Thr Gln Arg Thr Thr  
85 90 95

Glu Pro His Ser Ala Pro Arg Ser Pro Leu Trp Leu Leu Ala Ser Arg  
100 105 110

Pro Thr Arg Ala Ala Met Val Thr Ser Pro Pro Pro Leu  
115 120 125

<210> 5808

<211> 227

<212> PRT

<213> Homo sapiens

<400> 5808

Lys Met Asp Trp Gly Thr Leu Gln Thr Ile Leu Gly Gly Val Asn Lys  
1 5 10 15

His Ser Thr Ser Ile Gly Lys Ile Trp Leu Thr Val Leu Phe Ile Phe  
20 25 30

Arg Ile Met Ile Leu Val Val Ala Ala Lys Glu Val Trp Gly Asp Glu  
35 40 45

Gln Ala Asp Phe Val Cys Asn Thr Leu Gln Pro Gly Cys Lys Asn Val  
50 55 60

Cys Tyr Asp His Tyr Phe Pro Ile Ser His Ile Arg Leu Trp Ala Leu  
65 70 75 80

Gln Leu Ile Phe Val Ser Thr Pro Ala Leu Leu Val Ala Met His Val  
85 90 95

Ala Tyr Arg Arg His Glu Lys Lys Arg Lys Phe Ile Lys Gly Glu Ile  
100 105 110

Lys Ser Glu Phe Lys Asp Ile Glu Glu Ile Lys Thr Gln Lys Val Arg  
115 120 125

Ile Glu Gly Ser Leu Trp Trp Thr Tyr Thr Ser Ser Ile Phe Phe Arg  
130 135 140

Val Ile Phe Glu Ala Ala Phe Met Tyr Val Phe Tyr Val Met Tyr Asp  
145 150 155 160

Gly Phe Ser Met Gln Arg Leu Val Lys Cys Asn Ala Trp Pro Cys Pro

## 5097

	165		170		175
Asn Thr Val Asp Cys Phe Val Ser Arg Pro Thr Glu Lys Thr Val Phe					
	180		185		190
Thr Val Phe Met Ile Ala Val Ser Gly Ile Cys Ile Leu Leu Asn Val					
	195		200		205
Thr Glu Leu Cys Tyr Leu Leu Ile Arg Tyr Cys Ser Gly Lys Ser Lys					
	210		215		220
Lys Pro Val					
225					

&lt;210&gt; 5809

&lt;211&gt; 213

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (65)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (72)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (75)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (80)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (86)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (166)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

## 5098

&lt;400&gt; 5809

Ala Thr Val Pro Ile Arg Pro Asn Phe Thr Gly Lys Ser Ser Tyr Arg  
 1 5 10 15  
 Val Tyr Lys Leu Pro Ile Ser Gly Glu Thr Phe Asn Arg Glu Lys Phe  
 20 25 30  
 Arg Ser Gln Asp Trp Glu Asn Pro Thr Glu Arg Glu Asp Asp Ser Asp  
 35 40 45  
 Lys Tyr Cys Lys Leu Asn Leu Gln Gln Ser Gly Ser Phe Gln Tyr Tyr  
 50 55 60  
 Xaa Leu Gln Gly Asn Glu Lys Xaa Gly Gly Xaa Tyr Ile Val Val Xaa  
 65 70 75 80  
 Pro Ile Leu Arg Val Xaa Ala Asp Asn His Val Leu Pro Leu Asp Cys  
 85 90 95  
 Val Thr Leu Gln Thr Phe Leu Ala Lys Cys Leu Gly Pro Phe Asp Glu  
 100 105 110  
 Trp Glu Ser Arg Leu Arg Val Ala Lys Glu Ser Gly Tyr Asn Met Ile  
 115 120 125  
 His Phe Thr Pro Leu Gln Thr Leu Gly Leu Ser Arg Ser Cys Tyr Ser  
 130 135 140  
 Leu Ala Asn Gln Leu Glu Leu Asn Pro Asp Phe Ser Arg Pro Asn Arg  
 145 150 155 160  
 Lys Tyr Thr Trp Asn Xaa Val Gly Gln Leu Val Glu Lys Leu Lys Lys  
 165 170 175  
 Glu Trp Ile Val Phe Cys Ile Thr Asp Val Val Tyr Asn His Thr Ala  
 180 185 190  
 Ala Asn Ser Asn Cys Ile Gln Glu His Pro Glu Cys Ala Tyr Ile Leu  
 195 200 205  
 Val Ile Ser Pro His  
 210

&lt;210&gt; 5810

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;



## 5099

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (38)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5810

Gly	Val	His	Tyr	Cys	Glu	Phe	Ile	Ile	Leu	Lys	Val	Gly	Asp	Ala	Lys
1				5					10					15	

Ser	Thr	Arg	Leu	Lys	Xaa	Tyr	Glu	Val	Phe	Ser	Ser	Phe	Asn	Ser	Ile
			20					25					30		

Leu	Leu	Glu	Lys	Asn	Xaa	His	Asn	Arg	Gly	Ser	Phe	Thr	Phe	Pro	Gln
		35					40					45			

Pro	Ser	Arg	Leu	Leu	Tyr	Cys	Asn	Val	Gly	Lys	Ile	Ala	Tyr	Asn	Lys
	50					55					60				

Asn	Cys	Ser
65		

&lt;210&gt; 5811

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (165)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (185)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (195)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5811

Val	Arg	Ala	Gly	Pro	Ala	Ala	Ala	Gly	Pro	Arg	Pro	Gly	Ala	Glu	Arg
1				5				10					15		

## 5100

Lys Cys Trp Ser Leu Arg Ser Leu Arg Pro Leu Gly Gly Arg Cys Ala  
                   20                                  25                                  30  
 Trp Pro Gly Thr Ser Ala Pro Ala His Arg Pro Gly Ala Ala Glu Gly  
                   35                                  40                                  45  
 Arg Pro Arg Gly Pro Val Pro Ala Glu Pro Arg Pro Cys Pro Leu Ala  
                   50                                  55                                  60  
 Leu Leu Ser Gly His Tyr Leu Tyr Tyr His Tyr Gly Cys Asp Gly Leu  
                   65                                  70                                  75                                  80  
 Asp Asp Arg Gly Trp Gly Cys Gly Tyr Arg Thr Leu Gln Thr Leu Cys  
                                   85                                  90                                  95  
 Ser Trp Pro Glu Gly Gln Pro Ala Gly Val Pro Gly Leu Ala Ala Val  
                   100                                  105                                  110  
 Gln Ala Ala Leu Glu Asp Met Gly Asp Lys Pro Pro Gly Phe Arg Gly  
                   115                                  120                                  125  
 Ser Arg Asp Trp Ile Gly Cys Val Glu Ala Ser Leu Cys Leu Ala His  
                   130                                  135                                  140  
 Phe Gly Gly Pro Gln Gly Arg Leu Cys His Val Pro Arg Gly Val Gly  
                   145                                  150                                  155                                  160  
 Leu His Gly Glu Xaa Glu Arg Leu Tyr Ser His Phe Ala Gly Gly Gly  
                                   165                                  170                                  175  
 Gly Pro Val Met Val Gly Gly Asp Xaa Asp Ala Arg Ser Lys Ala Leu  
                   180                                  185                                  190  
 Leu Gly Xaa Cys Val Gly Ser Gly Thr Glu Ala Tyr Val Leu Val Leu  
                   195                                  200                                  205  
 Asp Pro His Tyr Trp Gly Thr Pro Lys Ser Pro Ser Glu Leu Gln Ala  
                   210                                  215                                  220  
 Ala Gly Trp Val Gly Trp Gln Glu Val Ser Ala Ala Phe Asp Pro Asn  
                   225                                  230                                  235                                  240  
 Ser Phe Tyr Asn Leu Cys Leu Thr Ser Leu Ser Ser Gln Gln Gln Gln  
                                   245                                  250                                  255  
 Arg Thr Leu Asp  
                   260

&lt;210&gt; 5812

## 5101

<211> 364  
<212> PRT  
<213> Homo sapiens

<220>  
<221> SITE  
<222> (2)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (154)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (166)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (269)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (299)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (310)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (319)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (356)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (363)  
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5812  
Trp Xaa Pro Arg Ala Ala Gly Ile Arg His Glu Leu Phe Gln Ala Leu

## 5102

1	5	10	15
Ile Asp Ile Gln Glu Phe Tyr Glu Val Thr Leu Leu Asp Asn Pro Lys	20	25	30
Cys Ile Asp Arg Ser Lys Pro Ser Glu Pro Ile Gln Pro Val Asn Thr	35	40	45
Trp Glu Ile Ser Ser Leu Pro Ser Ser Thr Val Thr Ser Glu Thr Leu	50	55	60
Pro Ser Ser Leu Ser Pro Ser Val Glu Lys Tyr Arg Tyr Gln Asp Glu	65	70	75
Asp Thr Pro Pro Gln Glu His Ile Ser Pro Gln Ile Thr Asn Glu Val	85	90	95
Ile Gly Pro Glu Leu Val His Val Ser Glu Lys Asn Leu Ser Glu Ile	100	105	110
Glu Asn Val His Gly Phe Val Ser His Ser His Ile Ser Pro Ile Lys	115	120	125
Pro Thr Glu Ala Val Leu Pro Ser Pro Pro Thr Val Pro Val Ile Pro	130	135	140
Val Leu Pro Val Pro Ala Glu Asn Thr Xaa Ile Leu Pro Thr Ile Pro	145	150	155
Gln Ala Asn Pro Pro Xaa Val Leu Val Asn Thr Asp Ser Leu Glu Thr	165	170	175
Pro Thr Tyr Val Asn Gly Thr Asp Ala Asp Tyr Glu Tyr Glu Glu Ile	180	185	190
Thr Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala Gly Gly	195	200	205
Thr Asp Asn Pro His Ile Gly Asp Asp Ser Ser Ile Phe Ile Thr Lys	210	215	220
Ile Ile Thr Gly Gly Ala Ala Ala Gln Asp Gly Arg Leu Arg Val Asn	225	230	235
Asp Cys Ile Leu Arg Val Asn Glu Val Asp Val Arg Asp Val Thr His	245	250	255
Ser Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser Xaa Val Arg Leu	260	265	270
Tyr Val Lys Arg Arg Lys Pro Val Ser Glu Lys Ile Met Glu Ile Lys			

## 5103

275		280		285
Leu Ile Lys Gly Pro Lys Gly Leu Gly Phe Xaa Ile Ala Gly Gly Val				
290		295		300
Gly Asn Gln His Ile Xaa Gly Asp Asn Ser Ile Tyr Val Thr Xaa Ile				
305		310		315 320
Ile Glu Gly Gly Ala Ala His Lys Asp Gly Lys Leu Gln Ile Gly Asp				
	325		330	335
Lys Leu Leu Ala Val Asn Asn Val Cys Leu Glu Glu Val Thr His Glu				
	340		345	350
Glu Ala Val Xaa Ala Leu Lys Ser Thr Ser Xaa Phe				
355		360		

&lt;210&gt; 5813

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (45)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5813

Gly Ser Cys Ser Ser Arg Cys Asp Ser Arg Asn Gln Arg His Leu Arg				
1		5		10 15
Val Ser Arg Lys Pro Pro Phe Val Val Ser Arg Thr Glu Gly Tyr Ile				
	20		25	30
Gly Val Leu Ile Asp Asp Leu Thr Thr Leu Gly Thr Xaa Glu Pro Tyr				
	35		40	45
Arg Met Phe Thr Ser Arg Val Glu Phe Arg Leu Ser Leu Arg Pro Asp				
	50		55	60
Asn Ala Asp Ser Arg Leu Thr Leu Arg Gly Tyr Lys Asp Ala Gly Cys				
65		70		75 80
Val Ser Gln Gln Arg Tyr Glu Arg Ala Cys Trp Met Lys Ser Ser Leu				
		85		90 95
Glu Glu Gly Ile Ser Val Leu Lys Ser Ile Glu Phe Leu Ser Ser Lys				
	100		105	110

## 5104

Trp Lys Lys Leu Ile Pro Glu Ala Ser Ile Ser Thr Ser Arg Ser Leu  
 115 120 125

Pro Val Arg Ala Leu Asp Val Leu Lys Tyr Glu Glu Val Asp Met Asp  
 130 135 140

Ser Leu Ala Lys Ala Val Pro Glu Pro Leu Lys Lys Tyr Thr Lys Cys  
 145 150 155 160

Arg Glu Leu Ala Glu Arg Leu Lys Ile Glu Ala Thr Tyr Glu Ser Val  
 165 170 175

Leu Phe His Gln Leu Gln Glu Ile Lys Gly Val Gln Gln Asp Glu Ala  
 180 185 190

Leu Gln Leu Pro Lys Asp Leu Asp Tyr Leu Thr Ile Arg Asp Val Ser  
 195 200 205

Leu Ser His Glu Val Arg Glu Lys Leu His Phe Ser Arg Pro Gln Thr  
 210 215 220

Ile Gly Ala Ala Ser Arg Ile Pro Gly Val Thr Pro Ala Ala Ile Ile  
 225 230 235 240

Asn Leu Leu Arg Phe Val Lys Thr Thr Gln Arg Arg Gln Ser Ala Met  
 245 250 255

Asn Glu Ser Ser Lys Thr Asp Gln Tyr Leu Cys Asp Ala Asp Arg Leu  
 260 265 270

Gln Glu Arg Glu Leu  
 275

<210> 5814

<211> 36

<212> PRT

<213> Homo sapiens

<400> 5814

Ile Phe His Arg Val Leu Leu Cys Asp Leu Asn Phe Ser Leu Gly Pro  
 1 5 10 15

Ala Ser Asp Ile Val Gly Gly Leu Ser Trp Phe Gln Glu Ile Arg Leu  
 20 25 30

Ala Phe Ser Ser  
 35

## 5105

&lt;210&gt; 5815

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5815

Ala	Gly	Ser	Gln	Glu	Ser	Ala	Lys	Ala	Leu	Met	Ile	Arg	Glu	Lys	Tyr
1				5					10					15	

Ala	Gly	Ser	Pro	Thr	His	Leu	Pro	Ala	Asp	His	Ile	Pro	Val	Pro	Gly
			20					25					30		

Ser	Ser	Arg	Ala	Asp	Thr	Ala	Pro	Pro	Glu	Glu	Gly	Leu	Pro	Asp	Phe
		35					40					45			

His	Pro	Pro	Pro	Leu	Pro	Gln	Glu	Asp	Pro	Tyr	Cys	Leu	Asp	Asp	Ala
	50					55					60				

Pro	Pro	Asn	Leu	Asp	Tyr	Leu	Val	His	Met	Gln	Gly	Gly	Ile	Leu	Phe
65					70					75					80

Val	Tyr	Asp	Asn	Lys	Lys	Met	Leu	Glu	His	Gln	Glu	Pro	His	Ser	Leu
				85					90					95	

Pro	Tyr	Pro	Asp	Leu	Glu	Thr	Tyr	Thr	Val	Asp	Met	Ser	His	Ile	Leu
			100					105					110		

Ala	Leu	Ile	Thr	Asp	Gly	Pro	Thr	Lys	Thr	Tyr	Cys	His	Arg	Arg	Leu
		115					120					125			

Asn	Phe	Leu	Glu	Ser	Lys	Phe	Ser	Leu	His	Glu	Met	Leu	Asn	Glu	Met
	130					135					140				

Ser	Glu	Phe	Lys	Glu	Leu	Lys	Ser	Asn	Pro	His	Arg	Asp	Phe	Tyr	Asn
145					150					155					160

&lt;210&gt; 5816

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5816

Lys	Thr	Lys	Tyr	Leu	Leu	Trp	Asp	Lys	Ile	Leu	Tyr	Ala	Tyr	Leu	Glu
1				5					10					15	

## 5106

Tyr Trp Glu Asp Gly Lys Glu Tyr Lys Glu Lys Asn Asn Cys Thr Pro  
20 25 30

His Ser Arg His Asn Leu Leu Phe Thr Ser Leu Gly Cys Ile Ser Ile  
35 40 45

Pro Thr Arg Trp Asn His Leu Tyr Val Tyr Leu Ile Arg Ile Met Leu  
50 55 60

His Thr Val Leu Phe Pro Ser  
65 70

<210> 5817

<211> 23

<212> PRT

<213> Homo sapiens

<400> 5817

Lys Lys Ala Trp Glu Pro Val Cys Phe Glu Arg Thr Asp Asp Ile Gly  
1 5 10 15

Arg Ala Leu Glu Val Pro Gly  
20

<210> 5818

<211> 155

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (48)



## 5107

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5818

Pro His Pro Thr Xaa Trp Xaa Gln Leu Glu Glu Xaa Cys Arg Arg Leu  
1 5 10 15

Ala Glu Val Ser Lys Pro Pro Lys Gln Arg Cys Cys Val Ala Ser Gln  
20 25 30

Gln Arg Asp Arg Asn His Ser Ala Thr Val Gln Thr Gly Ala Thr Xaa  
35 40 45

Phe Ser Asn Pro Ser Leu Ala Pro Glu Asp His Lys Glu Pro Lys Lys  
50 55 60

Leu Ala Gly Val His Ala Leu Gln Ala Ser Glu Leu Val Val Thr Tyr  
65 70 75 80

Phe Phe Cys Gly Glu Glu Ile Pro Tyr Arg Arg Met Leu Lys Ala Gln  
85 90 95

Ser Leu Thr Leu Gly His Phe Lys Glu Gln Leu Ser Lys Lys Gly Asn  
100 105 110

Tyr Arg Tyr Tyr Phe Lys Lys Ala Ser Asp Glu Phe Ala Cys Gly Ala  
115 120 125

Val Phe Glu Glu Ile Trp Glu Asp Glu Thr Val Leu Pro Met Tyr Glu  
130 135 140

Gly Arg Ile Leu Gly Lys Val Glu Arg Ile Asp  
145 150 155

<210> 5819

<211> 317

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (113)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

## 5108

&lt;221&gt; SITE

&lt;222&gt; (116)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (245)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5819

Met Asn Lys Leu Asn Glu Leu Glu Lys Ile Cys Glu Ile Leu Gln Ala  
 1 5 10 15

Glu Lys Tyr Xaa Leu Val Thr Glu Leu Asn Asp Ser Arg Ser Glu Cys  
 20 25 30

Ile Thr Ala Thr Arg Lys Met Ala Glu Glu Val Gly Lys Leu Leu Asn  
 35 40 45

Glu Val Lys Ile Leu Asn Asp Asp Ser Gly Leu Leu His Gly Glu Leu  
 50 55 60

Val Glu Asp Ile Pro Gly Gly Glu Phe Gly Glu Gln Pro Asn Glu Gln  
 65 70 75 80

His Pro Val Ser Leu Ala Pro Leu Asp Glu Ser Asn Ser Tyr Glu His  
 85 90 95

Leu Thr Leu Ser Asp Lys Glu Val Gln Met His Phe Ala Glu Leu Gln  
 100 105 110

Xaa Lys Phe Xaa Ser Leu Gln Ser Glu His Lys Ile Leu His Asp Gln  
 115 120 125

His Cys Gln Met Ser Ser Lys Met Ser Glu Leu Gln Thr Tyr Val Asp  
 130 135 140

Ser Leu Lys Ala Glu Asn Leu Val Leu Ser Thr Asn Leu Arg Asn Phe  
 145 150 155 160

Gln Gly Asp Leu Val Lys Glu Met Gln Leu Gly Leu Glu Glu Gly Leu  
 165 170 175

Val Pro Ser Leu Ser Ser Ser Cys Val Pro Asp Ser Ser Ser Leu Ser  
 180 185 190

Ser Leu Gly Asp Ser Ser Phe Tyr Arg Ala Leu Leu Glu Gln Thr Gly  
 195 200 205

Asp Met Ser Leu Leu Ser Asn Leu Glu Gly Ala Val Ser Ala Asn Gln  
 210 215 220

## 5109

Cys Ser Val Asp Glu Val Phe Cys Ser Ser Leu Gln Glu Glu Asn Leu  
 225 230 235 240

Thr Arg Lys Glu Xaa Pro Ser Ala Pro Ala Lys Gly Val Glu Glu Leu  
 245 250 255

Glu Ser Leu Cys Glu Val Tyr Arg Gln Ser Leu Glu Lys Leu Glu Glu  
 260 265 270

Lys Met Glu Ser Gln Gly Ile Met Lys Asn Lys Glu Ile Gln Glu Leu  
 275 280 285

Glu Gln Leu Leu Ser Ser Glu Gly Lys Ser Leu Thr Ala Leu Gly Ala  
 290 295 300

Val Phe Val Arg His Asp Ser Gly Thr Glu Leu Thr Ala  
 305 310 315

<210> 5820

<211> 55

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5820

Pro Asn Trp Glu Lys Lys Cys Ile Arg Leu Ala Leu Xaa Thr Arg Glu  
 1 5 10 15

Gln His Ile Arg Arg Asp Lys Ala Thr Ser Asn Ile Cys Thr Ala Gln  
 20 25 30

Ala Leu Leu Ala Asn Met Ala Ala Met Phe Ala Ile Tyr His Gly Ser  
 35 40 45

His Gly Leu Xaa His Ile Ala  
 50 55

## 5110

&lt;210&gt; 5821

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5821

Asn Gln Asn Lys Gly Gln Tyr Arg Lys Tyr His Gly Val Tyr Asn Lys  
 1 5 10 15

Leu Asn Phe Trp Leu Pro Ile Gln Thr Gly Leu Asn Gly Met Phe Ile  
 20 25 30

Leu Asn Lys Glu Phe Ala Met Asp Lys Ile Tyr Leu Ala Tyr Cys Glu  
 35 40 45

Leu Glu Val Arg Pro Ala Val Thr Leu Val Phe Pro His Ser Met Glu  
 50 55 60

Glu Glu Glu Arg Lys Thr  
 65 70

&lt;210&gt; 5822

&lt;211&gt; 465

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5822

Ala Gly Glu Lys Leu Leu Lys Asp Cys Val Leu Leu His Leu Pro Cys  
 1 5 10 15

Ala Arg Ser Pro Pro Val Ser His Ser Val Thr Met Val Gln Trp Lys  
 20 25 30

Arg Leu Cys Gln Leu His Tyr Leu Trp Ala Leu Gly Cys Tyr Met Leu  
 35 40 45

Leu Ala Thr Val Ala Leu Lys Leu Ser Phe Arg Leu Lys Cys Asp Ser  
 50 55 60

Asp His Leu Gly Leu Glu Ser Arg Glu Ser Gln Ser Gln Tyr Cys Arg  
 65 70 75 80

Asn Ile Leu Tyr Asn Phe Leu Lys Leu Pro Ala Lys Arg Ser Ile Asn  
 85 90 95

Cys Ser Gly Val Thr Arg Gly Asp Gln Glu Ala Val Leu Gln Ala Ile  
 100 105 110

Leu Asn Asn Leu Glu Val Lys Lys Lys Arg Glu Pro Phe Thr Asp Thr

## 5111

115	120	125
His Tyr Leu Ser Leu Thr Arg Asp Cys Glu His Phe Lys Ala Glu Arg		
130	135	140
Lys Phe Ile Gln Phe Pro Leu Ser Lys Glu Glu Val Glu Phe Pro Ile		
145	150	155
Ala Tyr Ser Met Val Ile His Glu Lys Ile Glu Asn Phe Glu Arg Leu		
	165	170
		175
Leu Arg Ala Val Tyr Ala Pro Gln Asn Ile Tyr Cys Val His Val Asp		
	180	185
		190
Glu Lys Ser Pro Glu Thr Phe Lys Glu Ala Val Lys Ala Ile Ile Ser		
	195	200
		205
Cys Phe Pro Asn Val Phe Ile Ala Ser Lys Leu Val Arg Val Val Tyr		
	210	215
		220
Ala Ser Trp Ser Arg Val Gln Ala Asp Leu Asn Cys Met Glu Asp Leu		
	225	230
		235
Leu Gln Ser Ser Val Pro Trp Lys Tyr Phe Leu Asn Thr Cys Gly Thr		
	245	250
		255
Asp Phe Pro Ile Lys Ser Asn Ala Glu Met Val Gln Ala Leu Lys Met		
	260	265
		270
Leu Asn Gly Arg Asn Ser Met Glu Ser Glu Val Pro Pro Lys His Lys		
	275	280
		285
Glu Thr Arg Trp Lys Tyr His Phe Glu Val Val Arg Asp Thr Leu His		
	290	295
		300
Leu Thr Asn Lys Lys Lys Asp Pro Pro Pro Tyr Asn Leu Thr Met Phe		
	305	310
		315
Thr Gly Asn Ala Tyr Ile Val Ala Ser Arg Asp Phe Val Gln His Val		
	325	330
		335
Leu Lys Asn Pro Lys Ser Gln Gln Leu Ile Glu Trp Val Lys Asp Thr		
	340	345
		350
Tyr Ser Pro Asp Glu His Leu Trp Ala Thr Leu Gln Arg Ala Arg Trp		
	355	360
		365
Met Pro Gly Ser Val Pro Asn His Pro Lys Tyr Asp Ile Ser Asp Met		
	370	375
		380
Thr Ser Ile Ala Arg Leu Val Lys Trp Gln Gly His Glu Gly Asp Ile		

## 5112

385                                      390                                      395                                      400  
 Asp Lys Gly Ala Pro Tyr Ala Pro Cys Ser Gly Ile His Gln Arg Ala  
    405                                      410                                      415  
 Ile Cys Val Tyr Gly Ala Gly Asp Leu Asn Trp Met Leu Gln Asn His  
    420                                      425                                      430  
 His Leu Leu Ala Asn Lys Phe Asp Pro Lys Val Asp Asp Asn Ala Leu  
    435                                      440                                      445  
 Gln Cys Leu Glu Glu Tyr Leu Arg Tyr Lys Ala Ile Tyr Gly Thr Glu  
    450                                      455                                      460  
 Leu  
 465

<210> 5823  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (24)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5823  
 His Gln Pro His Gly Ser Pro Glu Leu Cys Trp Lys Val Glu Thr Gly  
   1  5  10  15  
 Arg Glu Ala Ser His Gly Ser Xaa Glu Pro Asp Pro Thr Asn Gln Leu  
   20  25  30  
 Ile Phe Lys Arg Gln Asp Gly Gly Arg Asp His Ser Arg Glu Pro Cys  
   35  40  45  
 Ser Leu Phe Leu Pro Val Ala Lys Ser Gly Ala Arg Lys Ser Leu Ser  
   50  55  60  
 Val  
 65

<210> 5824  
 <211> 101  
 <212> PRT  
 <213> Homo sapiens

## 5113

&lt;400&gt; 5824

Asp Leu Gly Leu Glu Gly Trp Gly Met Gly Arg Glu Gly His Ser Leu  
 1 5 10 15

Leu Leu His Glu Ser Asp Ile Ser Glu Thr Glu Gln Leu Pro Asp Ala  
 20 25 30

Trp Val Arg Asn Pro Arg Pro His Leu Leu Arg Thr Gly Ser Ser Glu  
 35 40 45

Ser Thr Leu Arg Glu Lys Gly Glu Asn Ile Thr Ser Val Asp Ser Pro  
 50 55 60

Ala Thr Thr Ala Leu Glu Glu Lys Ala Ala Ala Thr Ser Gln Arg Gly  
 65 70 75 80

Val Lys Asp Pro Cys Pro Arg Asn Arg Ala Ala Pro Pro Ala Leu Thr  
 85 90 95

Pro Leu Thr Phe Ser  
 100

&lt;210&gt; 5825

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5825

His Val Ser Phe Ala Leu Leu Val Phe Tyr Val Ile Ser Phe Asn Cys  
 1 5 10 15

Leu Leu His Leu Thr Val Tyr Ile Ile Gln Gln Phe Thr Ser Leu Asn  
 20 25 30

Ser Arg Trp Lys Asn Arg Cys Gln Ser Met Lys Ile Phe Pro Ser Ile  
 35 40 45

Ser Lys Tyr Phe Ser Arg Ile Tyr Phe Ser Lys Gln Thr Ile  
 50 55 60

&lt;210&gt; 5826

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

## 5114

&lt;221&gt; SITE

&lt;222&gt; (131)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5826

Val Leu Glu Leu Asp Gln Glu Glu Leu Gln Leu Gly Arg Gly Gly Ala  
 1 5 10 15

Pro Arg Arg Ala Arg Ala Ala Arg Arg Gly Val Leu Leu Leu Ala His  
 20 25 30

Arg Glu Pro Pro Pro Ala Arg Ala Glu Ala Pro Ser Arg Gln Ala Ala  
 35 40 45

Cys Leu Pro Pro Leu Ser Ile Ser Pro Glu Ser Gln Pro Gly Ala Pro  
 50 55 60

Gly Pro Leu Pro Leu Ser Gly Trp Arg Ser Ser Arg Pro Leu Pro Val  
 65 70 75 80

Ser Leu Leu Leu Ser Leu Gly Ser Gln Pro Pro Leu Ser Phe Ser Trp  
 85 90 95

Thr Gly Ser His Pro Leu Arg Ser Pro Ser Phe Ser Ser Gly Ser Leu  
 100 105 110

Pro Leu Pro Leu Ala His Lys Pro Arg Ser Pro Lys Leu Leu Ser His  
 115 120 125

Phe Pro Xaa Pro Lys Val Pro Ala Phe Leu Leu Pro Phe Leu Cys Thr  
 130 135 140

Ile Pro Ile Leu Pro Phe Leu Tyr  
 145 150

&lt;210&gt; 5827

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5827

Pro Ile Glu Ile Glu Arg Cys Glu Pro Val Arg Ser Lys Leu Glu Glu  
 1 5 10 15

Val Gln Arg Lys Leu Gly Phe Ala Leu Ser Asp Ile Ser Val Val Ser  
 20 25 30

Asn Tyr Ser Ser Glu Trp Glu Leu Asp Pro Val Lys Asp Val Leu Ile  
 35 40 45



## 5115

Leu Ser Ala Leu Arg Arg Met Leu Trp Ala Ala Asp Asp Phe Leu Glu  
 50 55 60

Asp Leu Pro Phe Glu Gln Ile Gly Asn Leu Arg Glu Glu Ile Ile Asn  
 65 70 75 80

Cys Ala Gln Gly Lys Lys  
 85

&lt;210&gt; 5828

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (59)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5828

Ala Thr Val His Pro Ala Cys Gln Ile Phe Pro His Tyr Thr Pro Ser  
 1 5 10 15

Val Ala Tyr Pro Trp Ser Pro Glu Ala His Pro Leu Ile Cys Gly Pro  
 20 25 30

Pro Gly Leu Asp Lys Arg Leu Leu Pro Glu Thr Pro Gly Pro Cys Tyr  
 35 40 45

Ser Asn Ser Gln Pro Val Trp Leu Cys Leu Xaa Pro Arg Gln Pro Leu  
 50 55 60

Glu Pro His Pro Pro Gly Glu Gly Pro Ser Glu Trp Ser Ser Asp Thr  
 65 70 75 80

Ala Glu Gly Arg Pro Cys Pro Tyr Pro His Cys Gln Val Cys Arg Pro  
 85 90 95

Ser Leu Ala Gln Arg Arg Asn Ser Arg Ser Cys Val Asn Arg Leu Cys  
 100 105 110

Glu Met Phe Arg Pro Ser Ser Asn Gln Glu Cys Ala Pro Asp Val Phe  
 115 120 125

Gly Pro Tyr Leu Ala Gln Ser Pro Ala Pro Gly Lys Gly Lys Asp His  
 130 135 140

Ser Lys His His Ser Phe Cys Arg Thr Ser

## 5116

145

150

&lt;210&gt; 5829

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5829

Ile Phe Phe Leu Ile Ala Leu Leu Val Lys Ser Glu Lys Lys Asn Gln  
1 5 10 15

Arg Arg Phe Glu Thr Gly Ala Leu Cys Ala Arg Met Thr Lys Cys Thr  
20 25 30

Ser Phe Arg Val Cys Met Leu Val Asn Ser Gln Ile Tyr Leu Tyr Phe  
35 40 45

Phe Ala Ser Ile Glu  
50

&lt;210&gt; 5830

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5830

Lys Asn Phe Glu Ser Thr Tyr Asn Leu Glu Pro Pro Arg Ser Thr Phe  
1 5 10 15

Glu Leu Ser Tyr Leu Ser Gly Gln Lys Gln Cys Gly Ser Cys Met Tyr  
20 25 30

Leu Ile Asp Val Ser Cys Leu Pro Lys Met Tyr Thr Ile Arg Leu Cys  
35 40 45

Pro Asp His Pro Gly His Met Phe Ser Gly Pro Pro Glu Val Ser Val  
50 55 60

Ser Gly His Trp Ser Leu Arg Phe Gly Ser Glu  
65 70 75

&lt;210&gt; 5831

&lt;211&gt; 356

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

## 5117

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5831

Ala	Leu	Leu	Ser	Trp	Glu	Met	Ser	Ala	Ala	Cys	Trp	Glu	Glu	Pro	Trp
1				5					10					15	
Gly	Leu	Pro	Gly	Gly	Phe	Ala	Lys	Xaa	Val	Leu	Val	Thr	Gly	Gly	Ala
			20					25					30		
Gly	Phe	Ile	Ala	Ser	His	Met	Ile	Val	Ser	Leu	Val	Glu	Asp	Tyr	Pro
		35					40					45			
Asn	Tyr	Met	Ile	Ile	Asn	Leu	Asp	Lys	Leu	Asp	Tyr	Cys	Ala	Ser	Leu
	50					55					60				
Lys	Asn	Leu	Glu	Thr	Ile	Ser	Asn	Lys	Gln	Asn	Tyr	Lys	Phe	Ile	Gln
65					70					75					80
Gly	Asp	Ile	Cys	Asp	Ser	His	Phe	Val	Lys	Leu	Leu	Phe	Glu	Thr	Glu
				85					90					95	
Lys	Ile	Asp	Ile	Val	Leu	His	Phe	Ala	Ala	Gln	Thr	His	Val	Asp	Leu
			100					105					110		
Ser	Phe	Val	Arg	Ala	Phe	Glu	Phe	Thr	Tyr	Val	Asn	Val	Tyr	Gly	Thr
		115					120					125			
His	Val	Leu	Val	Ser	Ala	Ala	His	Glu	Ala	Arg	Val	Glu	Lys	Phe	Ile
	130					135					140				
Tyr	Val	Ser	Thr	Asp	Glu	Val	Tyr	Gly	Gly	Ser	Leu	Asp	Lys	Glu	Phe
145					150					155				160	
Asp	Glu	Ser	Ser	Pro	Lys	Gln	Pro	Thr	Asn	Pro	Tyr	Ala	Ser	Ser	Lys
				165					170					175	
Ala	Ala	Ala	Glu	Cys	Phe	Val	Gln	Ser	Tyr	Trp	Glu	Gln	Tyr	Lys	Phe
			180					185					190		
Pro	Val	Val	Ile	Thr	Arg	Ser	Ser	Asn	Val	Tyr	Gly	Pro	His	Gln	Tyr
		195					200					205			
Pro	Glu	Lys	Val	Ile	Pro	Lys	Phe	Ile	Ser	Leu	Leu	Gln	His	Asn	Arg
	210					215					220				
Lys	Cys	Cys	Ile	His	Gly	Ser	Gly	Leu	Gln	Thr	Arg	Asn	Phe	Leu	Tyr
225					230					235				240	

5118

Ala Thr Asp Val Val Glu Ala Phe Leu Thr Val Leu Lys Lys Gly Lys  
245 250 255

Pro Gly Glu Ile Tyr Asn Ile Gly Thr Asn Phe Glu Met Ser Val Val  
260 265 270

Gln Leu Ala Lys Glu Leu Ile Gln Leu Ile Lys Glu Thr Asn Ser Glu  
275 280 285

Ser Glu Met Glu Asn Trp Val Asp Tyr Val Asn Asp Arg Pro Thr Asn  
290 295 300

Asp Met Arg Tyr Pro Met Lys Ser Glu Lys Ile His Gly Leu Gly Trp  
305 310 315 320

Arg Pro Lys Val Pro Trp Lys Glu Gly Ile Lys Lys Thr Ile Glu Trp  
325 330 335

Tyr Arg Glu Asn Phe His Asn Trp Lys Asn Val Glu Lys Ala Leu Glu  
340 345 350

Pro Phe Pro Val  
355

<210> 5832

<211> 52

<212> PRT

<213> Homo sapiens

<400> 5832

Ala Lys Thr Ser His Leu Glu Phe Gly Lys Ile Arg Ile Ser Gln Val  
1 5 10 15

Glu His Leu Leu Asn Ala Arg Ile Val Ser Met His Phe Lys Ser Ile  
20 25 30

Phe Asn Leu Tyr Tyr Ser Leu Ile Ile Gly Ile Met Thr Pro Glu Gln  
35 40 45

Arg Gln Leu Ser  
50

<210> 5833

<211> 55

<212> PRT

<213> Homo sapiens

## 5119

&lt;400&gt; 5833

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Thr Arg Met Pro Ser Lys Ala Ala Leu Met Glu Glu Ala Lys Leu Met
 1              5              10              15

Ala Ser Leu Trp His Leu Ala Ala Met Ala Phe Ile Thr Tyr Val Leu
          20              25              30

Leu Ala Gly Met Ala Leu Gly Ile Gln Lys Arg Ser Val Pro Ser Pro
          35              40              45

Ser Leu Thr Leu Pro Ser Leu
    50              55

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&lt;210&gt; 5834

&lt;211&gt; 231

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (5)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (17)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

## 5120

<220>  
<221> SITE  
<222> (90)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (140)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (152)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (159)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (189)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (195)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (198)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (202)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (203)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (217)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

## 5121

&lt;221&gt; SITE

&lt;222&gt; (219)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5834

Xaa	Cys	Xaa	Ala	Xaa	Ala	Pro	Ser	Val	Pro	Ala	Trp	Gln	Val	Leu	His
1				5					10					15	

Xaa	His	Asn	Xaa	Xaa	Arg	Leu	Val	Glu	Phe	Ser	Ala	Phe	Leu	Glu	Gln
			20					25					30		

Gln	Arg	Asp	Pro	Asp	Ser	Tyr	Asn	Lys	His	Leu	Phe	Val	His	Ile	Gly
		35					40					45			

His	Ala	Asn	His	Ser	Tyr	Ser	Asp	Pro	Leu	Leu	Glu	Ser	Val	Asp	Ile
	50					55					60				

Arg	Gln	Ile	Tyr	Asp	Lys	Phe	Pro	Glu	Lys	Lys	Gly	Gly	Leu	Lys	Glu
65					70					75					80

Leu	Phe	Gly	Lys	Gly	Pro	Gln	Asn	Ala	Xaa	Phe	Leu	Val	Lys	Phe	Trp
				85					90					95	

Ala	Asp	Leu	Asn	Cys	Asn	Ile	Gln	Asp	Asp	Ala	Gly	Ala	Phe	Tyr	Gly
		100						105					110		

Val	Thr	Ser	Gln	Tyr	Glu	Ser	Ser	Glu	Asn	Met	Thr	Val	Thr	Cys	Ser
		115					120					125			

Thr	Lys	Val	Cys	Ser	Phe	Gly	Lys	Gln	Val	Val	Xaa	Lys	Val	Glu	Thr
	130					135					140				

Glu	Tyr	Ala	Arg	Phe	Glu	Asn	Xaa	Arg	Phe	Val	Tyr	Arg	Ile	Xaa	Arg
145					150					155				160	

Ser	Pro	Met	Cys	Glu	Tyr	Met	Ile	Asn	Phe	Ile	His	Lys	Leu	Lys	His
			165						170					175	

Leu	Pro	Glu	Lys	Tyr	Met	Met	Asn	Ser	Val	Leu	Glu	Xaa	Phe	Thr	Ile
		180						185					190		

Leu	Leu	Xaa	Val	Thr	Xaa	Arg	Asp	Thr	Xaa	Xaa	Thr	Leu	Leu	Cys	Met
		195					200					205			

Ala	Cys	Val	Phe	Glu	Val	Ser	Asn	Xaa	Glu	Xaa	Gly	Ala	Gln	His	His
	210					215					220				

Ile	Tyr	Arg	Leu	Val	Lys	Asp
225					230	

## 5122

&lt;210&gt; 5835

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5835

Ala Asp Leu Arg Glu Gln Arg Gly Leu Arg Gln Ala Thr Asp His Gln  
1 5 10 15

Glu Leu Val Glu Ile Pro Thr Arg Pro Leu Leu Thr Lys Leu Ser Leu  
20 25 30

Ile Thr Ala Pro Arg Arg Gly Glu Arg Ala Pro Val Pro Leu Arg Ala  
35 40 45

Gly Gly His Ser Thr Gly Asp Thr Ala  
50 55

&lt;210&gt; 5836

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5836

Ile Ala His Tyr Phe Leu Tyr Arg Tyr Leu Lys Lys Thr Val Tyr Gly  
1 5 10 15

Leu His Phe Phe Xaa Cys His Ile Gly Leu Met Leu Leu Ser Asn Gly  
20 25 30

Gly Ala Arg Ser His His Ser Leu Ser Pro Gln Ile Asp Phe Val Pro  
35 40 45

Pro Ser Asn Lys Leu Ser Lys Ser  
50 55

&lt;210&gt; 5837

&lt;211&gt; 555

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



## 5123

&lt;400&gt; 5837

Gln	Tyr	Arg	Ser	Glu	Phe	Pro	Gly	Arg	Pro	Thr	Arg	Pro	Ala	Val	Thr
1				5				10						15	
Ala	Thr	Ala	Ala	Ser	Asp	Arg	Met	Glu	Ser	Asp	Ser	Asp	Ser	Asp	Lys
			20					25					30		
Ser	Ser	Asp	Asn	Ser	Gly	Leu	Lys	Arg	Lys	Thr	Pro	Ala	Leu	Lys	Met
		35					40					45			
Ser	Val	Ser	Lys	Arg	Ala	Arg	Lys	Ala	Ser	Ser	Asp	Leu	Asp	Gln	Ala
	50					55					60				
Ser	Val	Ser	Pro	Ser	Glu	Glu	Glu	Asn	Ser	Glu	Ser	Ser	Ser	Glu	Ser
65					70					75					80
Glu	Lys	Thr	Ser	Asp	Gln	Asp	Phe	Thr	Pro	Glu	Lys	Lys	Ala	Ala	Val
				85					90						95
Arg	Ala	Pro	Arg	Arg	Gly	Pro	Leu	Gly	Gly	Arg	Lys	Lys	Lys	Lys	Ala
			100					105						110	
Pro	Ser	Ala	Ser	Asp	Ser	Asp	Ser	Lys	Ala	Asp	Ser	Asp	Gly	Ala	Lys
			115				120					125			
Pro	Glu	Pro	Val	Ala	Met	Ala	Arg	Ser	Ala	Ser	Ser	Ser	Ser	Ser	Ser
	130					135					140				
Ser	Ser	Ser	Ser	Asp	Ser	Asp	Val	Ser	Val	Lys	Lys	Pro	Pro	Arg	Gly
145					150					155					160
Arg	Lys	Pro	Ala	Glu	Lys	Pro	Leu	Pro	Lys	Pro	Arg	Gly	Arg	Lys	Pro
				165					170					175	
Lys	Pro	Glu	Arg	Pro	Pro	Ser	Ser	Ser	Ser	Ser	Asp	Ser	Asp	Ser	Asp
			180					185					190		
Glu	Val	Asp	Arg	Ile	Ser	Glu	Trp	Lys	Arg	Arg	Asp	Glu	Ala	Arg	Arg
		195					200					205			
Arg	Glu	Leu	Glu	Ala	Arg	Arg	Arg	Arg	Glu	Gln	Glu	Glu	Glu	Leu	Arg
	210					215					220				
Arg	Leu	Arg	Glu	Gln	Glu	Lys	Glu	Glu	Lys	Glu	Arg	Arg	Arg	Glu	Arg
225					230					235					240
Ala	Asp	Arg	Gly	Glu	Ala	Glu	Arg	Gly	Ser	Gly	Gly	Ser	Ser	Gly	Asp
				245					250					255	
Glu	Leu	Arg	Glu	Asp	Asp	Glu	Pro	Val	Lys	Lys	Arg	Gly	Arg	Lys	Gly
				260				265					270		

## 5124

Arg Gly Arg Gly Pro Pro Ser Ser Ser Asp Ser Glu Pro Glu Ala Glu  
 275 280 285  
 Leu Glu Arg Glu Ala Lys Lys Ser Ala Lys Lys Pro Gln Ser Ser Ser  
 290 295 300  
 Thr Glu Pro Ala Arg Lys Pro Gly Gln Lys Glu Lys Arg Val Arg Pro  
 305 310 315 320  
 Glu Glu Lys Gln Gln Ala Lys Pro Val Lys Val Glu Arg Thr Arg Lys  
 325 330 335  
 Arg Ser Glu Gly Phe Ser Met Asp Arg Lys Val Glu Lys Lys Lys Glu  
 340 345 350  
 Pro Ser Val Glu Glu Lys Leu Gln Lys Leu His Ser Glu Ile Lys Phe  
 355 360 365  
 Ala Leu Lys Val Asp Ser Pro Asp Val Lys Arg Cys Leu Asn Ala Leu  
 370 375 380  
 Glu Glu Leu Gly Thr Leu Gln Val Thr Ser Gln Ile Leu Gln Lys Asn  
 385 390 395 400  
 Thr Asp Val Val Ala Thr Leu Lys Lys Ile Arg Arg Tyr Lys Ala Asn  
 405 410 415  
 Lys Asp Val Met Glu Lys Ala Ala Glu Val Tyr Thr Arg Leu Lys Ser  
 420 425 430  
 Arg Val Leu Gly Pro Lys Ile Glu Ala Val Gln Lys Val Asn Lys Ala  
 435 440 445  
 Gly Met Glu Lys Glu Lys Ala Glu Glu Lys Leu Ala Gly Glu Glu Leu  
 450 455 460  
 Ala Gly Glu Glu Ala Pro Gln Glu Lys Ala Glu Asp Lys Pro Ser Thr  
 465 470 475 480  
 Asp Leu Ser Ala Pro Val Asn Gly Glu Ala Thr Ser Gln Lys Gly Glu  
 485 490 495  
 Ser Ala Glu Asp Lys Glu His Glu Glu Gly Arg Asp Ser Glu Glu Gly  
 500 505 510  
 Pro Arg Cys Gly Ser Ser Glu Asp Leu His Asp Ser Val Arg Glu Gly  
 515 520 525  
 Pro Asp Leu Asp Arg Pro Gly Ser Asp Arg Gln Glu Arg Glu Arg Ala  
 530 535 540

## 5125

Arg Gly Asp Ser Glu Ala Leu Asp Glu Glu Ser  
 545 550 555

<210> 5838

<211> 227

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (208)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5838

Gln His Pro Gln Pro Ala Asp Ser Arg Gln Thr Gly Ser Ser Lys Ala  
 1 5 10 15

Leu Ala Gln Thr Leu Pro Pro Pro Thr Xaa Ala Gly Glu Ser Asn Ser  
 20 25 30

Val Thr Cys Asn Cys Gly Gln Glu Ala Val Leu Leu Thr Val Arg Lys  
 35 40 45

Glu Gly Pro Asn Arg Gly Arg Gln Phe Phe Lys Cys Asn Gly Gly Ser  
 50 55 60

Cys Asn Phe Phe Leu Trp Ala Asp Ser Pro Asn Pro Gly Ala Gly Gly  
 65 70 75 80

Pro Pro Ala Leu Ala Tyr Arg Pro Leu Gly Ala Ser Leu Gly Cys Pro  
 85 90 95

Pro Gly Pro Gly Ile His Leu Gly Gly Phe Gly Asn Pro Gly Asp Gly  
 100 105 110

Ser Gly Ser Gly Thr Ser Cys Leu Cys Ser Gln Pro Ser Val Thr Arg  
 115 120 125

Thr Val Gln Lys Asp Gly Pro Asn Lys Gly Arg Gln Phe His Thr Cys  
 130 135 140

Ala Lys Pro Arg Glu Gln Gln Cys Gly Phe Phe Gln Trp Val Asp Glu  
 145 150 155 160

## 5126

Asn Thr Ala Pro Gly Thr Ser Gly Ala Pro Ser Trp Thr Gly Asp Arg  
                   165                  170                  175

Gly Arg Thr Leu Glu Ser Glu Ala Arg Ser Lys Arg Pro Arg Ala Gly  
                   180                  185                  190

Ser Ser Asp Met Gly Ser Thr Ala Lys Lys Pro Arg Lys Cys Ser Xaa  
                   195                  200                  205

Cys His Gln Pro Gly Thr His Pro Ser Leu Leu Ser Ser Glu Gln Met  
                   210                  215                  220

Ser Ser Gly  
 225

<210> 5839

<211> 254

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (172)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5839

Gly Arg Ser Arg Val Ser Ser Arg Lys Arg His Pro Ala Gly Pro Pro  
   1                  5                  10                  15

Gly Glu Ala Gln Glu Gly Ser Ala Lys Ala Glu Arg Pro Gly Leu Gln  
                   20                  25                  30

Asn Met Glu Leu Ala Pro Val Gln Arg Lys Ile Glu Ala Arg Ser Ala  
                   35                  40                  45

Glu Asp Ser Phe Thr Gly Phe Val Arg Thr Leu Tyr Phe Ala Asp Thr  
                   50                  55                  60

Tyr Leu Lys Asp Ser Ser Arg His Cys Pro Ser Leu Trp Ala Gly Thr  
   65                  70                  75                  80

Asn Gly Gly Thr Ile Tyr Ala Phe Ser Leu Arg Val Pro Pro Ala Glu  
                   85                  90                  95

Arg Arg Met Asp Glu Pro Val Arg Ala Glu Gln Ala Lys Glu Ile Gln  
                   100                  105                  110

Leu Met His Arg Ala Pro Val Val Gly Ile Leu Val Leu Asp Gly His

## 5127

115	120	125
Ser Val Pro Leu Pro Glu Pro Leu Glu Val Ala His Asp Leu Ser Lys		
130	135	140
Ser Pro Asp Met Gln Gly Ser His Gln Leu Leu Val Val Ser Glu Glu		
145	150	155
Gln Phe Lys Val Phe Thr Leu Pro Lys Val Ser Xaa Lys Leu Lys Leu		
165	170	175
Lys Leu Thr Ala Leu Glu Gly Ser Arg Val Arg Arg Val Ser Val Ala		
180	185	190
His Phe Gly Ser Arg Arg Ala Glu Asp Tyr Gly Glu His His Leu Ala		
195	200	205
Val Leu Thr Asn Leu Gly Asp Ile Gln Val Val Ser Leu Pro Leu Leu		
210	215	220
Lys Pro Gln Val Arg Tyr Ser Cys Ile Arg Arg Glu Asp Val Met Ala		
225	230	235
Ser Pro Pro Ala Ser Ser Pro Asn Met Ala Lys Ala Ser Thr		
245	250	

&lt;210&gt; 5840

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5840

Gln Pro Ile His Thr Arg Pro Gly Leu Phe Ile Tyr Thr Ala Ala His
1 5 10 15
Ser Ser Leu Gln Leu His Met Leu Tyr Leu Asp His Ser Glu Ala Asn
20 25 30
Ser Glu His Tyr Ile Ile Leu Ser Ile Asn Ile Ser Asn Ile Leu Lys
35 40 45
Tyr Thr Ile Gly Ile Gln Ala Ser Pro Ile Val Pro Gln Met Phe Gly
50 55 60
Cys Phe Cys Ser Trp Ile Val Cys Ile Arg Ile Gln Ala Arg Pro Ile
65 70 75 80
Tyr Cys Ile Tyr Leu Lys Cys Leu
85

5128

&lt;210&gt; 5841

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5841

Ser Phe Thr Gly Gln Ser Arg Thr Lys Ile Val Tyr Ser Met Tyr Ser  
1 5 10 15

Arg Lys Ala Ala Glu Glu Val Lys Arg Glu Leu Ile Lys Leu Lys Val  
20 25 30

Asn Tyr Tyr Ile Leu Glu Glu Ser Trp Cys Val Arg Arg Ser Lys Pro  
35 40 45

Gly Cys Ser Met Pro Glu Ile Trp Asp Val Glu Asp Pro Ala Asn Ala  
50 55 60

Gly Lys Thr Pro Leu Cys Asn Leu Leu Val Lys Asp Ser Lys Pro His  
65 70 75 80

Phe Thr Thr Val Phe Gln Asn Ser Val Tyr Lys Val Leu Glu Val Val  
85 90 95

Lys Glu

&lt;210&gt; 5842

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (7)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5842

Arg Ala Glu Phe Gly Thr Xaa Ser Leu Gln Ala Pro Ser Arg Glu Glu  
1 5 10 15

Ala Ala Lys Trp Ser Gln Val Arg Lys Asp Leu Cys Ser Leu Lys Val  
20 25 30

Ser Leu Gln Leu Arg Gly Glu Asp Gly Ser Val Trp Asn Tyr Lys Pro  
35 40 45

## 5129

Pro Ala Asp Ser Gly Gly Lys Glu Ile Phe Ser Leu Leu Pro His Met  
 50 55 60

Ala Asp Met Ser Thr Tyr Met Phe Lys Gly Ile Ile Ser Phe Ala Lys  
 65 70 75 80

Val Ile Ser Tyr Phe Arg Asp Leu Pro Ile Glu Asp Gln Ile Ser Cys  
 85 90 95

<210> 5843

<211> 158

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5843

Val Thr Ala Xaa Ser Gly Ile Leu Asp Val Thr Val Val Tyr Leu Asn  
 1 5 10 15

Pro Glu Gln His Cys Cys Gln Glu Ser Ser Asp Glu Glu Ala Cys Pro  
 20 25 30

Glu Asp Lys Gly Pro Gln Asp Pro Gln Ala Leu Ala Leu Asp Thr Gln  
 35 40 45

Ile Pro Ala Thr Pro Gly Pro Lys Pro Leu Val Arg Thr Ser Arg Glu  
 50 55 60

Pro Gly Lys Asp Val Thr Thr Ser Gly Tyr Ser Ser Val Ser Thr Ala  
 65 70 75 80

Ser Pro Thr Ser Ser Val Asp Gly Gly Leu Gly Ala Leu Pro Gln Pro  
 85 90 95

Thr Ser Val Leu Ser Leu Asp Ser Asp Ser His Thr Gln Pro Cys His  
 100 105 110

His Gln Ala Arg Lys Ser Cys Leu Gln Cys Arg Pro Pro Ser Pro Pro  
 115 120 125

Glu Ser Ser Val Pro Gln Gln Gln Val Lys Arg Ile Asn Leu Cys Ile

## 5130

130

135

140

His Ser Glu Glu Glu Asp Met Asn Leu Gly Leu Val Arg Leu  
 145 150 155

&lt;210&gt; 5844

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (64)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5844

Gly Cys Leu Asn Asp Glu His Leu Glu Glu Leu Gly Gly Ile Leu Lys  
 1 5 10 15

Ala Lys Leu Glu Gly His Phe Lys Asn Gln Glu Leu Arg Gln Val Lys  
 20 25 30

Arg Gln Glu Glu Asn Tyr Asp Gln Gln Val Glu Met Ser Leu Xaa Asp  
 35 40 45

Glu Asp Glu Cys Asp Val Tyr Ile Leu Thr Lys Val Ser Asp Ile Xaa  
 50 55 60

His Ser Leu Phe Lys Tyr Leu  
 65 70

&lt;210&gt; 5845

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5845

Arg Gly Gln His Gln Leu Glu Gly Gly Leu Gly Gly Phe Gln Gly Leu  
 1 5 10 15

His Gln Val Arg Arg Pro Cys Pro Glu Asp Trp Leu Leu Tyr Gly Arg  
 20 25 30



## 5131

Lys Cys Tyr Phe Phe Ser Glu Glu Pro Arg Asp Trp Asn Thr Gly Arg  
                   35                                  40                                  45

Gln Tyr Cys His Thr His Glu Ala Val Leu Ala Val Ile Gln Ser Gln  
           50                                  55                                  60

Lys Glu Leu Glu Phe Met Phe Lys Phe Thr Arg Arg Glu Pro Trp Ile  
       65                                  70                                  75                                  80

Gly Leu Arg Arg Val Gly Asp Glu Phe His Trp Val Asn Gly Asp Pro  
                                   85                                  90                                  95

Phe Asp Pro Asp Thr Phe Thr Ile Ala Gly Pro Gly Glu Cys Val Phe  
                   100                                  105                                  110

Val Glu Pro Thr Arg Leu Val Ser Thr Glu Cys Leu Met Thr Arg Pro  
           115                                  120                                  125

Trp Val Cys Ser Lys Met Ala Tyr Thr  
       130                                  135

<210> 5846

<211> 130

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (121)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (130)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5846

Gly Ala Arg Pro Gly Ala Glu Gly Ala Arg Ala Phe Gly Gly Ser Ile  
       1                                  5                                  10                                  15

Gly Leu Gln Ala Glu Glu Gln Gly Pro Cys His Leu Pro Gly Gly Arg  
                   20                                  25                                  30

Ser His Leu Cys Ser Gln Val Arg Gly Ser Ser Gly Gly Glu Thr Glu  
           35                                  40                                  45

Cys Ala Ser Trp Glu Ala Pro Arg Ile Val Gly Gly Glu Leu Ala Ala  
       50                                  55                                  60

## 5132

Ser Leu Ala Cys Pro Leu Phe Pro Val Pro Pro Ser Arg Leu Ala Pro  
 65 70 75 80  
 Ala Pro Ala Trp Glu Asp Pro His Leu Arg Leu Gln Cys Leu Phe Pro  
 85 90 95  
 Leu Glu Ala Leu Pro Ser Ala Arg Gly Pro Arg Ile Leu Pro Trp Pro  
 100 105 110  
 Ser Glu His Arg Leu Gly Arg Pro Xaa Asn Ser Ser Val Lys Pro Gly  
 115 120 125  
 Ile Xaa  
 130

<210> 5847  
 <211> 140  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (100)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (129)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5847  
 Glu Phe Gly Arg Gly Glu Ile Ser Arg Gly Pro Asp Val His Leu Thr  
 1 5 10 15  
 His Gly Leu Glu Pro Lys Asp Val Asn Arg Glu Phe Arg Leu Thr Glu  
 20 25 30  
 Ser Ser Thr Cys Glu Pro Ser Thr Val Ala Ala Val Leu Ser Arg Ala  
 35 40 45  
 Gln Gly Cys Arg Ser Pro Ser Ala Pro Asp Val Arg Thr Gly Ser Phe  
 50 55 60  
 Ser His Ser Ala Thr Asp Gly Ser Val Gly Leu Ile Gly Val Pro Glu  
 65 70 75 80  
 Lys Lys Val Ala Glu Lys Gln Ala Ser Thr Glu Leu Glu Ala Ala Ser  
 85 90 95

## 5133

Phe Pro Ala Xaa Met Tyr Ser Glu Pro Leu Arg Gln Phe Arg Asp Ser  
                   100                  105                  110

Ser Val Gly Asp Gln Asn Ala Gln Val Cys Gln Thr Asn Ser Arg Thr  
                   115                  120                  125

Xaa Cys Asn Asn Ser Gly Asp His Thr Pro Trp Ile  
                   130                  135                  140

<210> 5848

<211> 194

<212> PRT

<213> Homo sapiens

<400> 5848

Leu Leu Ser Asn Lys Met Asn Phe Val Leu Val Lys Val Arg Tyr Asp  
   1                  5                  10                  15

Val Val Gly Met Phe Trp Asn Met Phe Phe Gln Val Ala Ser Gly Gly  
                   20                  25                  30

Gly Gly Val Gly Asp Gly Val Gln Glu Pro Thr Thr Gly Asn Trp Arg  
                   35                  40                  45

Gly Met Leu Lys Thr Ser Lys Ala Glu Glu Leu Leu Ala Glu Glu Lys  
                   50                  55                  60

Ser Lys Pro Ile Pro Ile Met Pro Ala Ser Pro Gln Lys Gly His Ala  
   65                  70                  75                  80

Val Asn Leu Leu Asp Val Pro Val Pro Val Ala Arg Lys Leu Ser Ala  
                   85                  90                  95

Arg Glu Gln Arg Asp Cys Glu Val Ile Glu Arg Leu Ile Lys Ser Tyr  
                   100                  105                  110

Phe Leu Ile Val Arg Lys Asn Ile Gln Asp Ser Val Pro Lys Ala Val  
                   115                  120                  125

Met His Phe Leu Val Asn His Val Lys Asp Thr Leu Gln Ser Glu Leu  
                   130                  135                  140

Val Gly Gln Leu Tyr Lys Ser Ser Leu Leu Asp Asp Leu Leu Thr Glu  
   145                  150                  155                  160

Ser Glu Asp Met Ala Gln Arg Arg Lys Glu Ala Ala Asp Met Leu Lys  
                   165                  170                  175

## 5134

Ala Leu Gln Gly Ala Ser Gln Ile Ile Ala Glu Ile Arg Glu Thr His  
180 185 190

Leu Trp

<210> 5849

<211> 75

<212> PRT

<213> Homo sapiens

<400> 5849

Leu Phe Lys Val Ser Asn Val His Pro Gly Leu Gly Ile Thr Asn Val  
1 5 10 15

Gly Val Lys Met Pro Thr Lys Gly Phe Ser Ala Leu Glu Val Leu Arg  
20 25 30

Ser Pro Ile Cys Ile Lys Ala Asp Pro Phe Cys Lys Asp Leu Ser Phe  
35 40 45

Arg Thr Phe Ser Val Leu Leu Val Arg Thr Leu Glu Val Ile Leu Ile  
50 55 60

Ile Ser Thr Asp Ser Leu Thr Ala Glu Ala Thr  
65 70 75

<210> 5850

<211> 241

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (199)

<223> Xaa equals any of the naturally occurring L-amino acids

## 5135

<220>  
 <221> SITE  
 <222> (226)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (229)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (230)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (231)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5850  
 Cys Xaa Phe Xaa Asn Ala Gly Val Lys Gln Ser Ala Leu Leu Gly Leu  
 1 5 10 15  
 Lys Asp Leu Leu Ser Gln Tyr Pro Phe Ile Ile Asp Ala His Leu Ser  
 20 25 30  
 Asn Ile Leu Ser Glu Val Thr Ala Val Phe Thr Asp Lys Asp Ala Asn  
 35 40 45  
 Val Arg Leu Ala Ala Val Gln Leu Leu Gln Phe Leu Ala Pro Lys Ile  
 50 55 60  
 Arg Ala Glu Gln Ile Ser Pro Phe Phe Pro Leu Val Ser Ala His Leu  
 65 70 75 80  
 Ser Ser Ala Met Thr His Ile Thr Glu Gly Ile Gln Glu Asp Ser Leu  
 85 90 95  
 Lys Val Leu Asp Ile Leu Leu Glu Gln Tyr Pro Ala Leu Ile Thr Gly  
 100 105 110  
 Arg Ser Ser Ile Leu Leu Lys Asn Phe Val Glu Leu Ile Ser His Gln  
 115 120 125  
 Gln Leu Ser Lys Gly Leu Ile Asn Arg Asp Arg Ser Gln Ser Trp Ile  
 130 135 140  
 Leu Ser Val Asn Pro Asn Arg Arg Leu Thr Ser Gln Gln Trp Arg Leu  
 145 150 155 160

5136

Lys	Val	Leu	Val	Arg	Leu	Ser	Lys	Phe	Leu	Gln	Ala	Leu	Ala	Asp	Gly
				165					170					175	
Ser	Ser	Arg	Leu	Arg	Glu	Ser	Glu	Gly	Leu	Gln	Glu	Gln	Lys	Glu	Asn
			180					185					190		
Pro	His	Ala	Thr	Ser	Asn	Xaa	Ile	Phe	Ile	Asn	Trp	Lys	Glu	His	Ala
		195					200					205			
Asn	Asp	Gln	Gln	His	Ile	Gln	Gly	Tyr	Glu	Asn	Gly	Gly	Ser	Gln	Ala
	210					215					220				
Lys	Xaa	Gly	Pro	Xaa	Xaa	Xaa	Thr	Asp	Leu	Val	Gly	Gly	Leu	Met	Gly
225					230					235					240

Gly

```
<210> 5851
<211> 260
<212> PRT
<213> Homo sapiens
```

<400> 5851

Asn	Ser	Arg	Thr	Asp	Val	Arg	Met	Glu	Thr	Asp	Leu	Glu	Val	Ile	Ile
1					5				10					15	
Lys	Asp	Asn	Ser	Leu	Val	Leu	Thr	Pro	Ser	His	Ile	Lys	Ala	Tyr	Met
			20					25					30		
Leu	Met	Thr	Leu	Gln	Gly	Leu	Glu	Tyr	Leu	His	Gln	His	Trp	Ile	Leu
		35					40					45			
His	Arg	Asp	Leu	Lys	Pro	Asn	Asn	Leu	Leu	Leu	Asp	Glu	Asn	Gly	Val
	50					55					60				
Leu	Lys	Leu	Ala	Asp	Phe	Gly	Leu	Ala	Lys	Ser	Phe	Gly	Ser	Pro	Asn
65					70					75					80
Arg	Ala	Tyr	Thr	His	Gln	Val	Val	Thr	Arg	Trp	Tyr	Arg	Ala	Pro	Glu
				85					90					95	
Leu	Leu	Phe	Gly	Ala	Arg	Met	Tyr	Gly	Val	Gly	Val	Asp	Met	Trp	Ala
			100					105					110		
Val	Gly	Cys	Ile	Leu	Ala	Glu	Leu	Leu	Leu	Arg	Val	Pro	Phe	Leu	Pro
	115						120					125			
Gly	Asp	Ser	Asp	Leu	Asp	Gln	Leu	Thr	Arg	Ile	Phe	Glu	Thr	Leu	Gly

## 5137

130	135	140
Thr Pro Thr Glu Glu Gln Trp Pro Asp Met Cys Ser Leu Pro Asp Tyr		
145	150	155 160
Val Thr Phe Lys Ser Phe Pro Gly Ile Pro Leu His His Ile Phe Ser		
	165	170 175
Ala Ala Gly Asp Asp Leu Leu Asp Leu Ile Gln Gly Leu Phe Leu Phe		
	180	185 190
Asn Pro Cys Ala Arg Ile Thr Ala Thr Gln Ala Leu Lys Met Lys Tyr		
	195	200 205
Phe Ser Asn Arg Pro Gly Pro Thr Pro Gly Cys Gln Leu Pro Arg Pro		
	210	215 220
Asn Cys Pro Val Glu Thr Leu Lys Glu Gln Ser Asn Pro Ala Leu Ala		
	225	230 235 240
Ile Lys Arg Lys Arg Thr Glu Ala Leu Glu Gln Gly Gly Leu Pro Lys		
	245	250 255
Lys Leu Ile Phe		
	260	

<210> 5852  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 5852

Ser Ser Tyr Arg Ser Lys Ala Tyr Thr His Thr Lys Ile Thr Val Pro		
1	5	10 15
Arg Glu Arg Val Cys Val Ser Val Arg Val Ser Val Cys Ala Arg Ala		
	20	25 30
Arg Ser Trp Pro Asn Val Arg Thr Leu His Lys Gly Gly Arg Ser Ser		
	35	40 45
Tyr Arg Leu Phe Asn Val Arg Glu Thr Ile Phe Leu Leu Phe Gln Leu		
	50	55 60
Tyr Gln Ile Leu Val Pro Gln His Arg Asn Asp Ser Glu Ser Gln Thr		
	65	70 75 80
Lys Cys Ile Ile Cys Ser Ile Leu Ile Leu Leu His Ser		
	85	90

5138

&lt;210&gt; 5853

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5853

Cys Cys Leu Cys Gly Leu Trp Val Trp Thr Asn Pro Val Val Ala Cys  
1 5 10 15

Pro Pro Glu Pro Pro Pro Ser Gln Gln Arg His Gln Gly Ala Leu Gly  
20 25 30

Ser Pro Lys Thr Tyr His Ser Arg Val Pro Gln Ala Pro Gly Cys Cys  
35 40 45

Phe Leu Leu Pro Val Pro Gln Pro His Ala Pro Phe Tyr Ile Leu Cys  
50 55 60

Val Ser Lys Gly Trp Lys Asn Lys Thr Gln Leu Lys Ile Lys Lys Lys  
65 70 75 80

Lys Lys Lys Lys Lys Lys Lys Lys Lys  
85

&lt;210&gt; 5854

&lt;211&gt; 544

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (266)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (320)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (321)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE



## 5139

&lt;222&gt; (527)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (528)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (529)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5854

Leu	Ser	Trp	Pro	Val	Val	Ala	Asn	Gln	Val	Leu	Lys	Leu	Gly	Asn	Leu
1				5					10					15	

Glu	Phe	Lys	Pro	Glu	Ser	Arg	Val	Asn	Gly	Leu	Asp	Glu	Ser	Lys	Ile
			20					25					30		

Lys	Asp	Lys	Asn	Glu	Leu	Lys	Glu	Ile	Cys	Glu	Leu	Thr	Gly	Ile	Asp
		35					40					45			

Gln	Ser	Val	Leu	Glu	Arg	Ala	Phe	Ser	Phe	Arg	Thr	Val	Glu	Ala	Lys
	50					55					60				

Gln	Glu	Lys	Val	Ser	Thr	Thr	Leu	Asn	Val	Ala	Gln	Ala	Tyr	Tyr	Ala
65					70					75					80

Arg	Asp	Ala	Leu	Ala	Lys	Asn	Leu	Tyr	Ser	Arg	Leu	Phe	Ser	Trp	Leu
			85						90					95	

Val	Asn	Arg	Ile	Asn	Glu	Ser	Ile	Lys	Ala	Gln	Thr	Lys	Val	Arg	Lys
			100					105					110		

Lys	Val	Met	Gly	Val	Leu	Asp	Ile	Tyr	Gly	Phe	Glu	Ile	Phe	Glu	Asp
		115					120					125			

Asn	Ser	Phe	Glu	Gln	Phe	Ile	Ile	Asn	Tyr	Cys	Asn	Glu	Lys	Leu	Gln
		130				135					140				

Gln	Ile	Phe	Ile	Glu	Leu	Thr	Leu	Lys	Glu	Glu	Gln	Glu	Glu	Tyr	Ile
145					150					155					160

Arg	Glu	Asp	Ile	Glu	Trp	Thr	His	Ile	Asp	Tyr	Phe	Asn	Asn	Ala	Ile
			165						170					175	

Ile	Cys	Asp	Leu	Ile	Glu	Asn	Asn	Thr	Asn	Gly	Ile	Leu	Ala	Met	Leu
			180					185					190		

Asp	Glu	Glu	Cys	Leu	Arg	Pro	Gly	Thr	Val	Thr	Asp	Glu	Thr	Phe	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5140

195	200	205
Glu Lys Leu Asn Gln Val Cys Ala Thr His Gln His Phe Glu Ser Arg 210 215 220		
Met Ser Lys Cys Ser Arg Phe Leu Asn Asp Thr Ser Leu Pro His Ser 225 230 235 240		
Cys Phe Arg Ile Gln His Tyr Ala Gly Lys Val Leu Tyr Gln Val Glu 245 250 255		
Gly Phe Val Asp Lys Asn Asn Asp Leu Xaa Tyr Arg Asp Leu Ser Gln 260 265 270		
Ala Met Trp Lys Ala Ser His Ala Leu Ile Lys Ser Leu Phe Pro Glu 275 280 285		
Gly Asn Pro Ala Lys Ile Asn Leu Lys Arg Pro Pro Thr Ala Gly Ser 290 295 300		
Gln Phe Lys Ala Ser Val Ala Thr Leu Met Lys Asn Leu Gln Thr Xaa 305 310 315 320		
Xaa Pro Asn Tyr Ile Arg Cys Ile Lys Pro Asn Asp Lys Lys Ala Ala 325 330 335		
His Ile Phe Asn Glu Ala Leu Val Cys His Gln Ile Arg Tyr Leu Gly 340 345 350		
Leu Leu Glu Asn Val Arg Val Arg Arg Ala Gly Tyr Ala Phe Arg Gln 355 360 365		
Ala Tyr Glu Pro Cys Leu Glu Arg Tyr Lys Met Leu Cys Lys Gln Thr 370 375 380		
Trp Pro His Trp Lys Gly Pro Ala Arg Ser Gly Val Glu Val Leu Phe 385 390 395 400		
Asn Glu Leu Glu Ile Pro Val Glu Glu Tyr Ser Phe Gly Arg Ser Lys 405 410 415		
Ile Phe Ile Arg Asn Pro Arg Thr Leu Phe Lys Leu Glu Asp Leu Arg 420 425 430		
Lys Gln Arg Leu Glu Asp Leu Ala Thr Leu Ile Gln Lys Ile Tyr Arg 435 440 445		
Gly Trp Lys Cys Arg Thr His Phe Leu Leu Met Lys Lys Ser Gln Ile 450 455 460		
Val Ile Ala Ala Trp Tyr Arg Arg Tyr Ala Gln Gln Lys Arg Tyr Gln		

## 5141

465                      470                      475                      480  
 Gln Thr Lys Ser Ser Ala Leu Val Ile Gln Ser Tyr Ile Arg Gly Trp  
                          485                      490                      495  
 Lys Ala Arg Lys Ile Leu Arg Glu Leu Lys His Gln Lys Arg Cys Lys  
                          500                      505                      510  
 Glu Ala Val Thr Thr Ile Ala Ala Tyr Trp His Gly Thr Gln Xaa Xaa  
                          515                      520                      525  
 Xaa Lys Asn Gln Glu Ile Leu Gln Ser Gln Cys Trp Lys Arg Lys Ser  
                          530                      535                      540

&lt;210&gt; 5855

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5855

Leu Cys Leu Leu Lys Arg Pro Ser Pro Ile Leu Phe Asn Pro Gly Ser  
   1                      5                      10                      15  
 Pro Ser Gly Gly Pro Thr Leu Gly Thr Thr Ser Pro Thr Asp Gly Pro  
                          20                      25                      30  
 Leu Ala Ser Ala Ile Leu Leu Ala Ala Ile Ser Trp Ala Lys Met Leu  
                          35                      40                      45  
 Leu Leu Pro Asp Val Ala Asp Phe Pro Cys Gly Ala Lys Arg Lys Pro  
                          50                      55                      60  
 Arg Leu Leu Met Leu Ile Ile Pro Leu Ser Ser Gln Pro Leu Tyr Ile  
                          65                      70                      75                      80  
 Lys Ala Ser Gly Thr Lys Arg  
    85

&lt;210&gt; 5856

&lt;211&gt; 600

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

## 5142

<221> SITE  
 <222> (45)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (48)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (52)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (81)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (120)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (137)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (167)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <220>  
 <221> SITE  
 <222> (270)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 5856  
 Arg Thr Arg Gly Lys Gln Ala Ala Asn Asn Ser Leu Leu Leu His Leu  
   1                  5                  10                  15  
  
 Leu Lys Ser Gln Thr Ile Pro Lys Pro Met Asn Gly His Ser His Ser  
                   20                  25                  30  
  
 Glu Arg Gly Ser Ile Phe Glu Glu Ser Ser Thr Pro Xaa Thr Ile Xaa  
           35                  40                  45  
  
 Glu Tyr Ser Xaa Asn Asn Pro Ser Phe Thr Asp Asp Ser Ser Gly Asp  
   50                  55                  60

## 5143

Glu	Ser	Ser	Tyr	Ser	Asn	Cys	Val	Pro	Ile	Asp	Leu	Ser	Cys	Lys	His	65	70	75	80
Xaa	Thr	Glu	Lys	Ser	Glu	Ser	Asp	Gln	Pro	Val	Ser	Leu	Asp	Asn	Phe	85	90	95	
Thr	Gln	Ser	Leu	Leu	Asn	Thr	Trp	Asp	Pro	Lys	Val	Pro	Asp	Val	Asp	100	105	110	
Ile	Lys	Glu	Asp	Gln	Asp	Thr	Xaa	Lys	Asn	Ser	Lys	Leu	Asn	Ser	His	115	120	125	
Gln	Lys	Val	Thr	Leu	Leu	Gln	Leu	Xaa	Leu	Gly	His	Lys	Asn	Glu	Glu	130	135	140	
Asn	Val	Glu	Lys	Asn	Thr	Ser	Pro	Gln	Gly	Val	His	Asn	Asp	Val	Ser	145	150	155	160
Lys	Phe	Asn	Thr	Gln	Asn	Xaa	Ala	Arg	Thr	Ser	Val	Ile	Glu	Ser	Pro	165	170	175	
Ser	Thr	Asn	Arg	Thr	Thr	Pro	Val	Ser	Thr	Pro	Pro	Leu	Leu	Thr	Ser	180	185	190	
Ser	Lys	Ala	Gly	Ser	Pro	Ile	Asn	Leu	Ser	Gln	His	Ser	Leu	Val	Ile	195	200	205	
Lys	Trp	Asn	Ser	Pro	Pro	Tyr	Val	Cys	Ser	Thr	Gln	Ser	Glu	Lys	Leu	210	215	220	
Thr	Asn	Thr	Ala	Ser	Asn	His	Ser	Met	Asp	Leu	Thr	Lys	Ser	Lys	Asp	225	230	235	240
Pro	Pro	Gly	Glu	Lys	Pro	Ala	Gln	Asn	Glu	Gly	Ala	Gln	Asn	Ser	Ala	245	250	255	
Thr	Phe	Ser	Ala	Ser	Lys	Leu	Leu	Gln	Asn	Leu	Ala	Gln	Xaa	Gly	Met	260	265	270	
Gln	Ser	Ser	Met	Ser	Val	Glu	Glu	Gln	Arg	Pro	Ser	Lys	Gln	Leu	Leu	275	280	285	
Thr	Gly	Asn	Thr	Asp	Lys	Pro	Ile	Gly	Met	Ile	Asp	Arg	Leu	Asn	Ser	290	295	300	
Pro	Leu	Leu	Ser	Asn	Lys	Thr	Asn	Ala	Val	Glu	Glu	Asn	Lys	Ala	Phe	305	310	315	320
Ser	Ser	Gln	Pro	Thr	Gly	Pro	Glu	Pro	Gly	Leu	Ser	Gly	Ser	Glu	Ile	325	330	335	

## 5144

Glu Asn Leu Leu Glu Arg Arg Thr Val Leu Gln Leu Leu Leu Gly Asn  
 340 345 350  
 Pro Asn Lys Gly Lys Ser Glu Lys Lys Glu Lys Thr Pro Leu Arg Asp  
 355 360 365  
 Glu Ser Thr Gln Glu His Ser Glu Arg Ala Leu Ser Glu Gln Ile Leu  
 370 375 380  
 Met Val Lys Ile Lys Ser Glu Pro Cys Asp Asp Leu Gln Ile Pro Asn  
 385 390 395 400  
 Thr Asn Val His Leu Ser His Asp Ala Lys Ser Ala Pro Phe Leu Gly  
 405 410 415  
 Met Ala Pro Ala Val Gln Arg Ser Ala Pro Ala Leu Pro Val Ser Glu  
 420 425 430  
 Asp Phe Lys Ser Glu Pro Val Ser Pro Gln Asp Phe Ser Phe Ser Lys  
 435 440 445  
 Asn Gly Leu Leu Ser Arg Leu Leu Arg Gln Asn Gln Asp Ser Tyr Leu  
 450 455 460  
 Ala Asp Asp Ser Asp Arg Ser His Arg Asn Asn Glu Met Ala Leu Leu  
 465 470 475 480  
 Glu Ser Lys Asn Leu Cys Met Val Pro Lys Lys Arg Lys Leu Tyr Thr  
 485 490 495  
 Glu Pro Leu Glu Asn Pro Phe Lys Lys Met Lys Asn Asn Ile Val Asp  
 500 505 510  
 Ala Ala Asn Asn His Ser Ala Pro Glu Val Leu Tyr Gly Ser Leu Leu  
 515 520 525  
 Asn Gln Glu Glu Leu Lys Phe Ser Arg Asn Asp Leu Glu Phe Lys Tyr  
 530 535 540  
 Pro Ala Gly His Gly Ser Ala Ser Glu Ser Glu His Arg Ser Trp Ala  
 545 550 555 560  
 Arg Glu Ser Lys Ser Phe Asn Val Leu Lys Gln Leu Leu Leu Ser Glu  
 565 570 575  
 Asn Cys Val Arg Asp Leu Ser Pro His Arg Ser Asn Ser Val Ala Asp  
 580 585 590  
 Ser Lys Lys Glu Arg Thr Gln Lys  
 595 600

5145

&lt;210&gt; 5857

&lt;211&gt; 308

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5857

Gln Tyr Gly Arg Ile Pro Gly Ser Thr His Ala Ser Ala Glu Pro Leu  
 1 5 10 15  
 Glu Asn Pro Phe Lys Lys Met Lys Asn Asn Ile Val Asp Ala Ala Asn  
 20 25 30  
 Asn His Ser Ala Pro Glu Val Leu Tyr Gly Ser Leu Leu Asn Gln Glu  
 35 40 45  
 Glu Leu Lys Phe Ser Arg Asn Asp Leu Glu Phe Lys Tyr Pro Ala Gly  
 50 55 60  
 His Gly Ser Ala Ser Glu Ser Glu His Arg Ser Trp Ala Arg Glu Ser  
 65 70 75 80  
 Lys Ser Phe Asn Val Leu Lys Gln Leu Leu Leu Ser Glu Asn Cys Val  
 85 90 95  
 Arg Asp Leu Ser Pro His Arg Ser Asn Ser Val Ala Asp Ser Lys Lys  
 100 105 110  
 Lys Gly His Lys Asn Asn Val Thr Asn Ser Lys Pro Glu Phe Ser Ile  
 115 120 125  
 Ser Ser Leu Asn Gly Leu Met Tyr Ser Ser Thr Gln Pro Ser Ser Cys  
 130 135 140  
 Met Asp Asn Arg Thr Phe Ser Tyr Pro Gly Val Val Lys Thr Pro Val  
 145 150 155 160  
 Ser Pro Thr Phe Pro Glu His Leu Gly Cys Ala Gly Ser Arg Pro Glu  
 165 170 175  
 Ser Gly Leu Leu Asn Gly Cys Ser Met Pro Ser Glu Lys Gly Pro Ile  
 180 185 190  
 Lys Trp Val Ile Thr Asp Ala Glu Lys Asn Glu Tyr Glu Lys Asp Ser  
 195 200 205  
 Pro Arg Leu Thr Lys Thr Asn Pro Ile Leu Tyr Tyr Met Leu Gln Lys  
 210 215 220

```
Gly Gly Asn Ser Val Thr Ser Arg Glu Thr Gln Asp Lys Asp Ile Trp
225                230                235                240

Arg Glu Ala Ser Ser Ala Glu Ser Val Ser Gln Val Thr Ala Lys Glu
                245                250                255

Glu Leu Leu Pro Thr Ala Glu Thr Lys Ala Ser Phe Phe Asn Leu Arg
                260                265                270

Ser Pro Tyr Asn Ser His Met Gly Asn Asn Ala Ser Arg Pro His Ser
                275                280                285

Ala Asn Gly Glu Val Tyr Gly Leu Leu Gly Ser Val Leu Thr Ile Lys
    290                295                300

Lys Glu Ser Glu
305
```

<213> Homo sapiens

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5858



## 5147

Thr	Leu	Glu	Ala	Glu	Lys	Glu	Arg	Arg	Lys	Ser	Gly	Leu	Ser	Ser	Arg	1	5	10	15
Val	Gln	Phe	Arg	Asn	Gln	Gly	Ser	Glu	Pro	Lys	Tyr	Thr	Gln	Glu	Leu	20	25	30	
Thr	Leu	Lys	Arg	Gln	Lys	Gln	Lys	Val	Cys	Met	Glu	Glu	Thr	Leu	Trp	35	40	45	
Leu	Gln	Asp	Asn	Ile	Arg	Asp	Lys	Leu	Arg	Pro	Ile	Pro	Ile	Thr	Ala	50	55	60	
Ser	Val	Glu	Ile	Gln	Glu	Pro	Ser	Ser	Arg	Arg	Arg	Val	Asn	Ser	Leu	65	70	75	80
Pro	Glu	Val	Leu	Pro	Ile	Leu	Asn	Ser	Asp	Glu	Pro	Lys	Thr	Ala	His	85	90	95	
Ile	Asp	Val	His	Phe	Leu	Lys	Glu	Gly	Cys	Gly	Asp	Asp	Asn	Val	Cys	100	105	110	
Asn	Ser	Asn	Leu	Lys	Leu	Glu	Tyr	Lys	Phe	Cys	Thr	Arg	Glu	Gly	Asn	115	120	125	
Xaa	Asp	Lys	Phe	Xaa	Tyr	Leu	Pro	Ile	Gln	Lys	Gly	Val	Pro	Glu	Leu	130	135	140	
Val	Leu	Lys	Asp	Gln	Lys	Asp	Ile	Ala	Leu	Glu	Ile	Thr	Val	Thr	Asn	145	150	155	160
Ser	Pro	Ser	Asn	Pro	Arg	Asn	Pro	Thr	Lys	Asp	Gly	Asp	Asp	Ala	His	165	170	175	
Glu	Ala	Lys	Leu	Ile	Ala	Thr	Phe	Pro	Asp	Thr	Leu	Thr	Tyr	Ser	Ala	180	185	190	
Tyr	Arg	Glu	Leu	Arg	Ala	Phe	Pro	Glu	Lys	Gln	Leu	Ser	Cys	Val	Ala	195	200	205	
Asn	Gln	Asn	Gly	Ser	Gln	Ala	Asp	Cys	Glu	Leu	Gly	Asn	Pro	Phe	Lys	210	215	220	
Arg	Asn	Ser	Asn	Val	Thr	Phe	Tyr	Leu	Val	Leu	Ser	Thr	Thr	Glu	Val	225	230	235	240
Thr	Phe	Asp	Thr	Pro	Asp	Leu	Asp	Ile	Asn	Leu	Lys	Leu	Glu	Thr	Thr	245	250	255	
Ser	Asn	Gln	Asp	Asn	Leu	Ala	Pro	Ile	Thr	Ala	Lys	Ala	Lys	Val	Val	260	265	270	

## 5148

Ile Glu Leu Leu Leu Ser Val Ser Gly Val Ala Lys Pro Ser Gln Val  
 275 280 285  
 Tyr Phe Gly Gly Thr Val Val Gly Glu Gln Ala Met Lys Ser Glu Asp  
 290 295 300  
 Glu Val Gly Ser Leu Ile Glu Tyr Glu Phe Arg Val Ile Asn Leu Gly  
 305 310 315 320  
 Lys Pro Leu Thr Asn Leu Gly Thr Ala Thr Leu Asn Ile Gln Trp Pro  
 325 330 335  
 Lys Glu Ile Ser Asn Gly Lys Trp Leu Leu Tyr Leu Val Lys Val Glu  
 340 345 350  
 Ser Lys Gly Leu Glu Lys Val Thr Cys Glu Pro Gln Lys Glu Ile Asn  
 355 360 365  
 Ser Leu Asn Leu Thr Glu Xaa His Asn Ser Arg Lys Lys Arg Glu Ile  
 370 375 380  
 Thr Glu Lys Gln Ile Asp Asp Asn Arg Lys Phe Ser Leu Phe Ala Glu  
 385 390 395 400  
 Arg Lys Tyr Gln Thr Leu Asn Cys Ser Val Asn Val Asn Cys Val Asn  
 405 410 415  
 Ile Arg Cys Pro Leu Arg Gly Leu Asp Ser Lys Ala Ser Leu Ile Leu  
 420 425 430  
 Arg Ser Arg Leu Trp Xaa Ser Thr Phe Leu Glu Glu Tyr Ser Lys Leu  
 435 440 445  
 Asn Tyr Leu Asp Ile Leu Met Arg Ala Phe Ile Asp Val Thr Ala Ala  
 450 455 460  
 Ala Glu Asn Ile Arg Leu Pro Asn Ala Gly Thr Gln Val Arg Val Thr  
 465 470 475 480  
 Val Phe Pro Ser Lys Thr Val Ala Gln Tyr Ser Gly Val Pro Trp Trp  
 485 490 495  
 Ile Ile Leu Val Ala Ile Leu Ala Gly Ile Leu Met Leu Ala Leu Leu  
 500 505 510  
 Val Phe Ile Leu Trp Lys Cys Gly Phe Phe Lys Arg Asn Lys Lys Asp  
 515 520 525  
 His Tyr Asp Ala Thr Tyr His Lys Ala Glu Ile His Ala Gln Pro Ser  
 530 535 540

## 5149

Asp Lys Glu Arg Xaa Thr Ser Asp Ala  
545 550

<210> 5859

<211> 110

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (110)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5859

Arg Thr Pro Glu Ser Trp Arg Leu Thr Pro Pro Ala Lys Val Gly Gly  
1 5 10 15

Leu Asp Phe Ser Pro Val Gln Thr Ser Gln Gly Ala Ser Asp Pro Leu  
20 25 30

Pro Asp Pro Leu Gly Leu Met Asp Leu Ser Thr Thr Pro Leu Gln Ser  
35 40 45

Ala Pro Pro Leu Glu Ser Pro Gln Arg Leu Leu Ser Ser Glu Pro Leu  
50 55 60

Asp Leu Ile Ser Val Pro Phe Gly Asn Ser Ser Pro Ser Asp Ile Asp  
65 70 75 80

Val Pro Lys Pro Gly Ser Pro Glu Pro Gln Val Ser Gly Leu Ala Ala  
85 90 95

Asn Arg Ser Leu Thr Glu Gly Leu Val Leu Gly His Asn Xaa  
100 105 110

<210> 5860

<211> 198

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5860

Pro Xaa Arg Pro Arg Gly Ala Ala Ala Ala Ala Ala Ala Gly Ala

## 5150

1	5	10	15
Ala Met Pro Lys Gly Gly Arg Lys Gly Gly His Lys Gly Arg Ala Arg	20	25	30
Gln Tyr Thr Ser Pro Glu Glu Ile Asp Ala Gln Leu Gln Ala Glu Lys	35	40	45
Gln Lys Ala Arg Glu Glu Glu Glu Gln Lys Glu Gly Gly Asp Gly Ala	50	55	60
Ala Gly Asp Pro Lys Lys Glu Lys Lys Ser Leu Asp Ser Asp Glu Ser	65	70	75
Glu Asp Glu Glu Asp Asp Tyr Gln Gln Lys Arg Lys Gly Val Glu Gly	85	90	95
Leu Ile Asp Ile Glu Asn Pro Asn Arg Val Ala Gln Thr Thr Lys Lys	100	105	110
Val Thr Gln Leu Asp Leu Asp Gly Pro Lys Glu Leu Ser Arg Arg Glu	115	120	125
Arg Glu Glu Ile Glu Lys Gln Lys Ala Lys Glu Arg Tyr Met Lys Met	130	135	140
His Leu Ala Gly Lys Thr Glu Gln Ala Lys Ala Asp Leu Ala Arg Leu	145	150	155
Ala Ile Ile Arg Lys Gln Arg Glu Glu Ala Ala Arg Lys Lys Glu Glu	165	170	175
Glu Arg Lys Ala Lys Asp Asp Ala Thr Leu Ser Gly Lys Arg Met Gln	180	185	190
Ser Leu Ser Leu Asn Lys	195		

&lt;210&gt; 5861

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5861

Lys Asn Lys Thr Lys Ala Val Phe Pro Asn Phe Gly Met Asn Pro Pro	1	5	10	15
Leu Phe Gln Met Lys Thr Ala Ser Arg Ser Ser Ser Lys Arg Lys Ser	20	25	30	

## 5151

Leu Gly Gly Ala Gln Arg Ala Arg Cys Pro Ser Thr Ser Val Leu Gly  
                   35                  40                  45

Thr Trp Arg Val Ala Ala Ser Pro Pro Ala Pro Val Pro Ser Cys  
           50                  55                  60

<210> 5862

<211> 229

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (221)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5862

Ala Thr Lys Ile Asn Leu Ser Leu Ser Ala Leu Gly Asn Val Ile Ser  
   1                  5                  10                  15

Ala Leu Val Asp Gly Lys Ser Thr His Ile Pro Tyr Arg Asp Ser Lys  
                   20                  25                  30

Leu Thr Arg Leu Leu Gln Asp Ser Leu Gly Gly Asn Ala Lys Thr Val  
                   35                  40                  45

Met Val Ala Asn Val Gly Pro Ala Ser Tyr Asn Val Glu Glu Thr Leu  
           50                  55                  60

Thr Thr Leu Arg Tyr Ala Asn Arg Ala Lys Asn Ile Lys Asn Lys Pro  
   65                  70                  75                  80

Arg Val Asn Glu Asp Pro Lys Asp Ala Leu Leu Arg Glu Phe Gln Glu  
                   85                  90                  95

Glu Ile Ala Arg Leu Lys Ala Gln Leu Glu Lys Arg Ser Ile Gly Arg  
                   100                  105                  110

Arg Lys Arg Arg Glu Lys Arg Arg Glu Gly Gly Gly Ser Gly Gly Gly  
           115                  120                  125

Gly Glu Glu Glu Glu Glu Gly Glu Glu Gly Glu Glu Glu Gly Asp  
           130                  135                  140

Asp Lys Asp Asp Tyr Trp Arg Glu Gln Gln Glu Lys Leu Glu Ile Glu  
   145                  150                  155                  160

Lys Arg Ala Ile Val Glu Asp His Ser Leu Val Ala Glu Glu Lys Met

## 5152

165                      170                      175  
 Arg Leu Leu Lys Glu Lys Glu Lys Lys Met Glu Asp Leu Arg Arg Glu  
                     180                      185                      190  
 Lys Asp Ala Ala Glu Met Leu Gly Ala Lys Ile Lys Val Pro Tyr Pro  
                     195                      200                      205  
 Tyr Pro Ser Leu Gly Pro Cys Pro Val Thr Ala Phe Xaa Phe Ile Lys  
                     210                      215                      220  
 Gln Gln Gln Lys Thr  
 225  
  
 <210> 5863  
 <211> 298  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 5863  
 Cys Glu Arg Gly Ser Leu His Phe Thr Gly Val Thr Gly Gly Asn Leu  
   1                    5                    10                    15  
 Arg Val Asn Gly Lys Glu Arg Ala Ser Gly Ile Tyr Phe Gly Ala Asn  
                     20                    25                    30  
 Glu Ala Leu Leu Ala Val Lys Asp Tyr Ile Arg Thr Gln Ile Ile Ser  
                     35                    40                    45  
 Lys Lys Ile Asn Thr Lys Phe Phe Gln Glu Glu Asn Thr Glu Lys Leu  
                     50                    55                    60  
 Lys Leu Lys Tyr Tyr Asn Leu Met Ile Gln Leu Asp Gln His Glu Gly  
                     65                    70                    75                    80  
 Ser Tyr Leu Ser Ile Cys Lys His Tyr Arg Ala Ile Tyr Asp Thr Pro  
                     85                    90                    95  
 Cys Ile Gln Ala Glu Ser Glu Lys Trp Gln Gln Ala Leu Lys Ser Val  
                     100                    105                    110  
 Val Leu Tyr Val Ile Leu Ala Pro Phe Asp Asn Glu Gln Ser Asp Leu  
                     115                    120                    125  
 Val His Arg Ile Ser Gly Asp Lys Lys Leu Glu Glu Ile Pro Lys Tyr  
                     130                    135                    140  
 Lys Asp Leu Leu Lys Leu Phe Thr Thr Met Glu Leu Met Arg Trp Ser  
                     145                    150                    155                    160

## 5153

Thr Leu Val Glu Asp Tyr Gly Met Glu Leu Arg Lys Gly Ser Leu Glu  
                             165                            170                            175  
 Ser Pro Ala Thr Asp Val Phe Gly Ser Thr Glu Glu Gly Glu Lys Arg  
                             180                            185                            190  
 Trp Lys Asp Leu Lys Asn Arg Val Val Glu His Asn Ile Arg Ile Met  
                             195                            200                            205  
 Ala Lys Tyr Tyr Thr Arg Ile Thr Met Lys Arg Met Ala Gln Leu Leu  
                             210                            215                            220  
 Asp Leu Ser Val Asp Glu Ser Glu Ala Phe Leu Ser Asn Leu Val Val  
                             225                            230                            235                            240  
 Asn Lys Thr Ile Phe Ala Lys Val Asp Arg Leu Ala Gly Ile Ile Asn  
                             245                            250                            255  
 Phe Gln Arg Pro Lys Asp Pro Asn Asn Leu Leu Asn Asp Trp Ser Gln  
                             260                            265                            270  
 Lys Leu Asn Ser Leu Met Ser Leu Val Asn Lys Thr Thr His Leu Ile  
                             275                            280                            285  
 Ala Lys Glu Glu Met Ile His Asn Leu Gln  
                             290                            295

&lt;210&gt; 5864

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5864

Asn Ser Ala Glu Cys Asn Pro Arg Phe Xaa Asn Ala Thr Ile Val Cys  
   1                            5                            10                            15  
 Asn Ser Leu Asp Gly Ser Asn Trp Gly Gln Glu Gln Arg Glu Asp His  
                             20                            25                            30  
 Leu Cys Phe Ser Pro Gly Ser Glu Val Lys Val Arg Ser Lys Gly Glu  
                             35                            40                            45  
 Arg Ala Leu Gly Val Met Ser Arg Gly Gly Pro Arg Trp Lys Arg Ala

## 5154

50                      55                      60  
 Trp Pro Gly Thr Gln Trp Leu Ala Leu Phe Glu Pro Ser Gly Thr Ala  
 65                      70                      75                      80  
 Leu Ala His Phe Gln Gly Leu Leu Pro Pro Leu Thr Pro Ser Leu Pro  
 85                      90                      95  
 Thr Val His Ser Asp Leu  
 100

&lt;210&gt; 5865

&lt;211&gt; 345

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5865

Leu Pro Val Arg Ala Glu Pro Thr Arg Ala Ala Ala Met Ser Gly Asp  
 1                      5                      10                      15  
 Glu Met Ile Phe Asp Pro Thr Met Ser Lys Lys Lys Lys Lys Lys Lys  
 20                      25                      30  
 Lys Pro Phe Met Leu Asp Glu Glu Gly Asp Thr Gln Thr Glu Glu Thr  
 35                      40                      45  
 Gln Pro Ser Glu Thr Lys Glu Val Glu Pro Glu Pro Thr Glu Asp Lys  
 50                      55                      60  
 Asp Leu Glu Ala Asp Glu Glu Asp Thr Arg Lys Lys Asp Ala Ser Asp  
 65                      70                      75                      80  
 Asp Leu Asp Asp Leu Asn Phe Phe Asn Gln Lys Lys Lys Lys Lys Lys  
 85                      90                      95  
 Thr Lys Lys Ile Phe Asp Ile Asp Glu Ala Glu Glu Gly Val Lys Asp  
 100                      105                      110  
 Leu Lys Ile Glu Ser Asp Val Gln Glu Pro Thr Glu Pro Glu Asp Asp  
 115                      120                      125  
 Leu Asp Ile Met Leu Gly Asn Lys Lys Lys Lys Lys Lys Asn Val Lys  
 130                      135                      140  
 Phe Pro Asp Glu Asp Glu Ile Leu Glu Lys Asp Glu Ala Leu Glu Asp  
 145                      150                      155                      160  
 Glu Asp Asn Lys Lys Asp Asp Gly Ile Ser Phe Ser Asn Gln Thr Gly  
 165                      170                      175



## 5155

Pro Ala Trp Ala Gly Ser Glu Arg Asp Tyr Thr Tyr Glu Glu Leu Leu  
                   180                                  185                                  190  
 Asn Arg Val Phe Asn Ile Met Arg Glu Lys Asn Pro Asp Met Val Ala  
                   195                                  200                                  205  
 Gly Glu Lys Arg Lys Phe Val Met Lys Pro Pro Gln Val Val Arg Val  
                   210                                  215                                  220  
 Gly Thr Lys Lys Thr Ser Phe Val Asn Phe Thr Asp Ile Cys Lys Leu  
                   225                                  230                                  235                                  240  
 Leu His Arg Gln Pro Lys His Leu Leu Ala Phe Leu Leu Ala Glu Leu  
                                   245                                  250                                  255  
 Gly Thr Ser Gly Ser Ile Asp Gly Asn Asn Gln Leu Val Ile Lys Gly  
                                   260                                  265                                  270  
 Arg Phe Gln Gln Lys Gln Ile Glu Asn Val Leu Arg Arg Tyr Ile Lys  
                   275                                  280                                  285  
 Glu Tyr Val Thr Cys His Thr Cys Arg Ser Pro Asp Thr Ile Leu Gln  
                   290                                  295                                  300  
 Lys Asp Thr Arg Leu Tyr Phe Leu Gln Cys Glu Thr Cys His Ser Arg  
                   305                                  310                                  315                                  320  
 Cys Ser Val Ala Ser Ile Lys Thr Gly Phe Gln Ala Val Thr Gly Lys  
                                   325                                  330                                  335  
 Arg Ala Gln Leu Arg Ala Lys Ala Asn  
                   340                                  345

&lt;210&gt; 5866

&lt;211&gt; 194

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5866

Arg Thr Ser Met Gly Ile Leu Tyr Ser Glu Pro Ile Cys Gln Ala Ala  
   1                                  5                                  10                                  15  
 Tyr Gln Asn Asp Phe Gly Gln Val Trp Arg Trp Val Lys Glu Asp Ser  
                   20                                  25                                  30  
 Ser Tyr Ala Asn Val Gln Asp Gly Phe Asn Gly Asp Thr Pro Leu Ile  
                   35                                  40                                  45

## 5156

Cys Ala Cys Arg Arg Gly His Val Arg Ile Val Ser Phe Leu Leu Arg  
     50                            55                            60  
 Arg Asn Ala Asn Val Asn Leu Lys Asn Gln Lys Glu Arg Thr Cys Leu  
     65                            70                            75                            80  
 His Tyr Ala Val Lys Lys Lys Phe Thr Phe Ile Asp Tyr Leu Leu Ile  
                             85                            90                            95  
 Ile Leu Leu Met Pro Val Leu Leu Ile Gly Tyr Phe Leu Met Val Ser  
                     100                            105                            110  
 Lys Thr Lys Gln Asn Glu Ala Leu Val Arg Met Leu Leu Asp Ala Gly  
                     115                            120                            125  
 Val Glu Val Asn Ala Thr Asp Cys Tyr Gly Cys Thr Ala Leu His Tyr  
                     130                            135                            140  
 Ala Cys Glu Met Lys Asn Gln Ser Leu Ile Pro Leu Leu Leu Glu Ala  
     145                            150                            155                            160  
 Arg Ala Asp Pro Thr Ile Lys Asn Lys His Gly Glu Ser Ser Leu Asp  
                             165                            170                            175  
 Ile Ala Arg Arg Leu Lys Phe Ser Gln Ile Glu Leu Met Leu Arg Lys  
                     180                            185                            190  
 Ala Leu

&lt;210&gt; 5867

&lt;211&gt; 469

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (8)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (65)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

5157

<220>

<221> SITE

**<222> (436)**

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5867

Ser Ala Ser Phe Ser Arg Gly Xaa Gln Leu Ser Phe Thr Asp Leu Gly  
1 5 10 15

Leu Pro Pro Thr Asp His Leu Gln Ala Ser Phe Gly Phe Gln Thr Phe  
20 25 30

Gln Pro Ser Gly Ile Leu Leu Asp His Gln Thr Trp Thr Arg Xaa Leu  
35 40 45

Gln Val Thr Leu Glu Asp Gly Tyr Ile Glu Leu Ser Thr Ser Asp Ser  
50 55 60

Xaa Gly Pro Ile Phe Lys Ser Pro Gln Thr Tyr Met Asp Gly Leu Leu  
65 70 75 80

His Tyr Val Ser Val Ile Ser Asp Asn Ser Gly Leu Arg Leu Leu Ile  
85 90 95

Asp Asp Gln Leu Leu Arg Asn Ser Lys Arg Leu Lys His Ile Ser Ser  
100 105 110

Ser Arg Gln Ser Leu Arg Leu Gly Gly Ser Asn Phe Glu Gly Cys Ile  
115 120 125

Ser Asn Val Phe Val Gln Arg Leu Ser Leu Ser Pro Glu Val Leu Asp  
130 135 140

Leu	Thr	Ser	Asn	Ser	Leu	Lys	Arg	Asp	Val	Ser	Leu	Gly	Gly	Cys	Ser
145					150					155					160

Leu Asn Lys Pro Pro Phe Leu Met Leu Leu Lys Gly Ser Thr Arg Phe  
165 170 175

Asn Lys Thr Lys Thr Phe Arg Ile Asn Gln Leu Leu Gln Asp Thr Pro  
180 185 190

Val Ala Ser Pro Arg Ser Val Lys Val Trp Gln Asp Ala Cys Ser Pro  
195 200 205

Leu Pro Lys Thr Gln Ala Asn His Gly Ala Leu Gln Phe Gly Asp Ile  
210 215 220

Pro Thr Ser His Leu Leu Phe Lys Leu Pro Gln Glu Leu Leu Lys Pro  
225 230 235 240

## 5158

Arg Ser Gln Phe Ala Val Asp Met Gln Thr Thr Ser Ser Arg Gly Leu  
                   245                                  250                                  255  
 Val Phe His Thr Gly Thr Lys Asn Ser Phe Met Ala Leu Tyr Leu Ser  
                   260                                  265                                  270  
 Lys Gly Arg Leu Val Phe Ala Leu Gly Thr Asp Gly Lys Lys Leu Arg  
                   275                                  280                                  285  
 Ile Lys Ser Lys Glu Lys Cys Asn Asp Gly Lys Trp His Thr Val Val  
                   290                                  295                                  300  
 Phe Gly His Asp Gly Glu Lys Gly Arg Leu Val Val Asp Gly Leu Arg  
 305                                  310                                  315                                  320  
 Ala Arg Glu Gly Ser Leu Pro Gly Asn Ser Thr Ile Ser Ile Arg Ala  
                                   325                                  330                                  335  
 Pro Val Tyr Leu Gly Ser Pro Pro Ser Gly Lys Pro Lys Ser Leu Pro  
                   340                                  345                                  350  
 Thr Asn Ser Phe Val Gly Cys Leu Lys Asn Phe Gln Leu Asp Ser Lys  
                   355                                  360                                  365  
 Pro Leu Tyr Thr Pro Ser Ser Ser Phe Gly Val Ser Ser Cys Leu Gly  
                   370                                  375                                  380  
 Gly Pro Leu Glu Lys Gly Ile Tyr Phe Ser Glu Glu Gly Gly His Val  
 385                                  390                                  395                                  400  
 Val Leu Ala His Ser Val Leu Leu Gly Pro Glu Phe Lys Leu Val Phe  
                                   405                                  410                                  415  
 Ser Ile Arg Pro Arg Ser Leu Thr Gly Ile Leu Ile His Ile Gly Ser  
                   420                                  425                                  430  
 Gln Pro Gly Xaa Ala Leu Met Cys Leu Pro Gly Gly Arg Lys Gly His  
                   435                                  440                                  445  
 Gly Leu Tyr Gly Gln Trp Gly Arg Trp Asp Leu Asn Val Gly His Thr  
                   450                                  455                                  460  
 Lys Ala Val Ser Val  
 465

&lt;210&gt; 5868

&lt;211&gt; 83

&lt;212&gt; PRT

## 5159

&lt;213&gt; Homo sapiens

&lt;400&gt; 5868

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Phe Leu Ile Leu Ser Gly Glu Leu Leu Ala Arg Ile Ile Tyr Leu Gln
 1             5             10             15

Ile Ile Leu Asp Gln Arg Leu Gly Ala Gly Leu Thr Pro Ser Ser Arg
          20             25             30

Leu Gly Ala Ser Ile His Phe Leu Val Gly Leu Asn Ile Pro Pro Ala
          35             40             45

Phe Arg Arg Ile His Arg Thr Tyr Cys Ser Phe Gln Met Thr Phe Trp
          50             55             60

Lys Ile Val Pro Phe Ala Asn Arg Asn Met Pro Glu Gly Ile Phe Ser
 65             70             75             80

Ser Phe Ile

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&lt;210&gt; 5869

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5869

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Ser Cys Thr Arg His Gln Ser Leu Pro Gly Ser Cys Asp Glu Leu His
 1             5             10             15

Leu Ser Pro Phe Leu Pro Gln Pro Gln Thr Leu Ser Phe Lys Glu Gly
          20             25             30

Leu Pro Gly Ser Leu His Pro Thr Ala Pro Met Arg Leu Gly Pro Arg
          35             40             45

Val His Ser Pro Gly Gly Ser Gln Leu Ser Gly Arg Ser Phe Pro Pro
          50             55             60

Asn Ile Phe Gln Leu Leu Gly Gly Asp His Arg Ala Leu Leu Leu Lys
 65             70             75             80

Ile Trp Leu Leu Gln Arg Pro Glu Ser Gln Glu Gly Leu Leu Pro Gly
          85             90             95

Arg Leu Val Val Met Glu Arg Arg Val Lys Met Thr Ser Cys Pro Ser
          100             105             110

Cys Pro Arg Phe Cys

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## 5160

115

<210> 5870  
 <211> 170  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (47)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (149)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (155)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5870  
 Arg Thr Tyr Phe Pro Val Lys Met Pro Thr Thr Lys Lys Thr Leu Met  
     1                    5                    10                    15  
 Phe Leu Ser Ser Phe Phe Thr Ser Leu Gly Ser Phe Ile Val Ile Cys  
                     20                    25                    30  
 Ser Ile Leu Gly Thr Gln Ala Trp Ile Thr Ser Thr Ile Ala Xaa Arg  
                     35                    40                    45  
 Asp Ser Ala Ser Asn Gly Ser Ile Phe Ile Thr Tyr Gly Leu Phe Arg  
                     50                    55                    60  
 Gly Glu Ser Ser Glu Glu Leu Ser His Gly Leu Ala Glu Pro Lys Lys  
     65                    70                    75                    80  
 Lys Phe Ala Val Leu Glu Ile Leu Asn Asn Ser Ser Gln Lys Asn Ser  
                     85                    90                    95  
 Ala Phe Gly Asp Tyr Pro Val Pro Gly Pro Glu Phe Asp His Val Ala  
                     100                    105                    110  
 Ala Glu Leu Trp Val Tyr Leu Leu Gln Gln His Gln Gln Pro Leu Pro  
                     115                    120                    125  
 Asp Ile Pro Gly Ala Arg Arg Gly Cys Thr Pro Gly Thr Gly Ser Gly  
     130                    135                    140

## 5161

Ile Leu Arg Phe Xaa Thr Met Ile Leu Leu Xaa Arg Thr Arg Ser Pro  
 145 150 155 160

Thr Asn Phe Pro Lys Val Val Gln Met Leu  
 165 170

<210> 5871

<211> 173

<212> PRT

<213> Homo sapiens

<400> 5871

Arg Thr Tyr Phe Pro Val Lys Met Pro Thr Thr Lys Lys Thr Leu Met  
 1 5 10 15

Phe Leu Ser Ser Phe Phe Thr Ser Leu Gly Ser Phe Ile Val Ile Cys  
 20 25 30

Ser Ile Leu Gly Thr Gln Ala Trp Ile Thr Ser Thr Ile Ala Val Arg  
 35 40 45

Asp Ser Ala Ser Asn Gly Ser Ile Phe Ile Thr Tyr Gly Leu Phe Arg  
 50 55 60

Gly Glu Ser Ser Glu Glu Leu Ser His Gly Leu Ala Glu Pro Lys Lys  
 65 70 75 80

Lys Phe Ala Ala Ser Phe Val Phe Val Thr Met Ile Leu Phe Val Ala  
 85 90 95

Asn Thr Gln Ser Asn Gln Leu Ser Glu Glu Leu Phe Gln Met Leu Tyr  
 100 105 110

Pro Ala Thr Thr Ser Lys Gly Thr Thr His Ser Tyr Gly Tyr Ser Phe  
 115 120 125

Trp Leu Ile Leu Leu Val Ile Leu Leu Asn Ile Val Thr Val Thr Ile  
 130 135 140

Ile Ile Phe Tyr Gln Lys Ala Arg Tyr Gln Arg Lys Gln Glu Gln Arg  
 145 150 155 160

Lys Pro Met Glu Tyr Ala Pro Arg Asp Gly Ile Leu Phe  
 165 170

<210> 5872

## 5162

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5872

His Arg Asn Arg Pro Ser Gln Cys His Leu Leu Asn Leu Trp Arg Pro  
 1 5 10 15

Pro Asp Leu Glu Glu Pro Thr Lys Val Asp Lys Leu Gln Glu Pro Leu  
 20 25 30

Leu Glu Ala Leu Lys Ile Tyr Ile Arg Lys Arg Arg Pro Ser Lys Pro  
 35 40 45

His Met Phe Pro Lys Ile Leu Met Lys Ile Thr Asp Leu Arg Ser Ile  
 50 55 60

Ser Ala Lys Gly Ala Glu Arg Val Ile Thr Leu Lys Met Glu Ile Pro  
 65 70 75 80

Gly Ser Met Pro Pro Leu Ile Gln Glu Met Leu Glu Asn Ser Glu Gly  
 85 90 95

His Glu Pro Leu Thr Pro Ser Ser Ser Gly Asn Thr Ala Glu His Ser  
 100 105 110

Pro Ser Ile Ser Pro Ser Ser Val Glu Asn Ser Gly Val Ser Gln Ser  
 115 120 125

Pro Leu Val Gln  
 130

&lt;210&gt; 5873

&lt;211&gt; 326

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5873

Ala His Ala Ser Ala His Ala Ser Ala Trp Val Pro Ala Pro Gln Arg  
 1 5 10 15

Ser Arg Asp Ser Pro Arg Arg Arg Ala Arg Arg Pro Glu Leu Pro Lys  
 20 25 30

Pro Ser Arg Ala Ala His Thr Pro Gly Leu His Ser Leu Phe Gln His  
 35 40 45

Pro Leu Val Leu Ala Ala Ala Arg Val Pro Glu Thr Glu Leu Pro Gln  
 50 55 60



## 5163

Arg Pro Arg Arg Arg Arg Cys Glu Gly Pro Met Arg Ala Pro Leu Leu  
 65 70 75 80  
 Pro Pro Ala Pro Val Val Leu Ser Leu Leu Ile Leu Gly Ser Gly His  
 85 90 95  
 Tyr Ala Ala Gly Leu Asp Leu Asn Asp Thr Tyr Ser Gly Lys Arg Glu  
 100 105 110  
 Pro Phe Ser Gly Asp His Ser Ala Asp Gly Phe Glu Val Thr Ser Arg  
 115 120 125  
 Ser Glu Met Ser Ser Gly Ser Glu Ile Ser Pro Val Ser Glu Met Pro  
 130 135 140  
 Ser Ser Ser Glu Pro Ser Ser Gly Ala Asp Tyr Asp Tyr Ser Glu Glu  
 145 150 155 160  
 Tyr Asp Asn Glu Pro Gln Ile Pro Gly Tyr Ile Val Asp Asp Ser Val  
 165 170 175  
 Arg Val Glu Gln Val Val Lys Pro Pro Gln Asn Lys Thr Glu Ser Glu  
 180 185 190  
 Asn Thr Ser Asp Lys Pro Lys Arg Lys Lys Lys Gly Gly Lys Asn Gly  
 195 200 205  
 Lys Asn Arg Arg Asn Arg Lys Lys Lys Asn Pro Cys Asn Ala Glu Phe  
 210 215 220  
 Gln Asn Phe Cys Ile His Gly Glu Cys Lys Tyr Ile Glu His Leu Glu  
 225 230 235 240  
 Ala Val Thr Cys Lys Cys Gln Gln Glu Tyr Phe Gly Glu Arg Cys Gly  
 245 250 255  
 Glu Lys Ser Met Lys Thr His Ser Met Ile Asp Ser Ser Leu Ser Lys  
 260 265 270  
 Ile Ala Leu Ala Ala Ile Ala Ala Phe Met Ser Ala Val Ile Leu Thr  
 275 280 285  
 Ala Val Ala Val Ile Thr Val Gln Leu Arg Arg Gln Tyr Val Arg Lys  
 290 295 300  
 Tyr Glu Gly Glu Ala Glu Glu Arg Lys Lys Leu Arg Gln Glu Asn Gly  
 305 310 315 320  
 Asn Val His Ala Ile Ala  
 325

5164

<210> 5874  
<211> 58  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 5874

Ala Pro Gln Arg Ser Ser Leu Val Asp Arg Val Arg Leu His Leu Lys  
1 5 10 15  
Lys Ile Lys Ile Lys Leu Phe Ser Glu Glu Gln Met Ser His Ser Ser  
20 25 30  
Asn Asp Pro Leu Ser Arg Asn Met Val Glu Phe Ser Pro Ile Gln Val  
35 40 45  
Ser His Ile Gln Lys Thr Thr Ser His Tyr  
50 55

<210> 5875  
<211> 93  
<212> PRT  
<213> Homo sapiens

&lt;400&gt; 5875

Gly Arg Leu Trp Ser Arg Glu Glu Ala Met Ala Thr Met Glu Asn Lys  
1 5 10 15  
Val Ile Cys Ala Leu Val Leu Val Ser Met Leu Ala Leu Gly Thr Leu  
20 25 30  
Ala Glu Ala Gln Thr Glu Thr Cys Thr Val Ala Pro Arg Glu Arg Gln  
35 40 45  
Asn Cys Gly Phe Pro Gly Val Thr Pro Ser Gln Cys Ala Asn Lys Gly  
50 55 60  
Cys Cys Phe Asp Asp Thr Val Arg Gly Val Pro Trp Cys Phe Tyr Pro  
65 70 75 80  
Asn Thr Ile Asp Val Pro Pro Glu Glu Glu Cys Glu Phe  
85 90

<210> 5876  
<211> 55

5165

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (24)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5876

Lys Val Pro Val Arg Asn Ser Arg Val Asp Pro Arg Val Arg Ile Ser  
 1 5 10 15

Pro Arg Ala Arg Leu Pro Pro Xaa Pro Asp Thr Ser Asp Thr Leu Leu  
 20 25 30

Gln Leu Cys Leu Gly Ser Gln His Arg Leu Thr Ala Leu Thr Leu Thr  
 35 40 45

Thr Gln Asn Trp Pro Lys Asn  
 50 55

&lt;210&gt; 5877

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5877

Ala Gly Arg Pro Met Lys Val Gly His Val Thr Glu Arg Thr Asp Ala  
 1 5 10 15

Ser Ser Ala Ser Ser Phe Leu Asp Ser Asp Glu Leu Glu Arg Thr Gly  
 20 25 30

Ile Asp Leu Gly Thr Thr Gly Arg Leu Gln Leu Met Ala Arg Leu Ala  
 35 40 45

Glu Gly Thr Gly Leu Gln Ile Pro Pro Ala Ala Gln Gln Ala Leu Gln  
 50 55 60

Met Ser Gly Ser Leu Ala Phe Gly Ala Val Ala Glu Phe Ser Phe Val  
 65 70 75 80

Ile Asp Leu Gln Thr Arg Leu Ser Gln Gln Thr Glu Ala Ser Ala Leu  
 85 90 95

Ala Ala Ala Ala Ser Val Gln Pro Leu Ala Thr Gln Cys Phe Gln Leu  
 100 105 110

Ser Asn Met Phe Asn Pro Gln Thr Glu Glu Glu Val Gly Trp Asp Thr

## 5166

115                      120                      125  
 Glu Ile Lys Asp Asp Val Ile Glu Glu Cys Asn Lys His Gly Gly Val  
 130                      135                      140  
 Ile His Ile Tyr Val Asp Lys Asn Ser Ala Gln Gly Asn Val Tyr Val  
 145                      150                      155                      160  
 Lys Cys Pro Ser Ile Ala Ala Ala Ile Ala Ala Val Asn Ala Leu His  
 165                      170                      175  
 Gly Arg Trp Phe Ala Gly Lys Met Ile Thr Ala Ala Tyr Val Pro Leu  
 180                      185                      190  
 Pro Thr Tyr His Asn Leu Phe Pro Asp Ser Met Thr Ala Thr Gln Leu  
 195                      200                      205  
 Leu Val Pro Ser Arg Arg  
 210

&lt;210&gt; 5878

&lt;211&gt; 91

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5878

Asn Cys Ser Pro Ala Phe Tyr Gly Ser Ser Leu Pro Cys Pro Gln Thr  
 1                      5                      10                      15

Gln Gln Lys Arg Arg Gly Arg Ile Arg Gly Leu Ser Arg Pro Ala Pro  
 20                      25                      30

Leu Pro Thr Cys His Thr Arg Cys Glu Phe Glu His Ser Pro Xaa Met  
 35                      40                      45

Glu Thr Ser His Pro Gln Leu Asn Asn Gly Pro Phe Met Pro Thr Leu  
 50                      55                      60

Pro Thr Arg Arg Gly Gln Arg Cys Thr Arg Arg Pro Ser Ser Ser Pro  
 65                      70                      75                      80

Ser Ser Ala Pro Ser His Tyr Ser Trp Phe Tyr  
 85                      90

5167

&lt;210&gt; 5879

&lt;211&gt; 52

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5879

Thr Gln Lys Thr Ser Ser Leu Leu Pro Ala Leu Ser Leu Gln Leu Pro  
1 5 10 15

Leu Leu Thr Arg Phe Ser Ile Met Cys Ser Val Lys Glu Glu Phe Trp  
20 25 30

Arg Val Gln Ser Ile Ile Thr Glu Leu Val Leu Lys Gly Glu Phe Gly  
35 40 45

Val Lys Arg Gln  
50

&lt;210&gt; 5880

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (12)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5880

Ala Asp Asp Ser Phe Phe Thr Gly Ile Ala Phe Xaa Thr Ser Ile Ser  
1 5 10 15

Val Asn Asn Cys Val Cys His Phe Ser Pro Leu Lys Ser Asp Gln Asp  
20 25 30

Tyr Ile Leu Lys Glu Gly Asp Leu Val Lys Met  
35 40

&lt;210&gt; 5881

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5881

Pro Thr Arg Pro Ala Gln Thr Ala Leu Pro Tyr Ala Met Asn Ser Glu

## 5168

1	5	10	15
Phe Ser Ser Val Leu Ala Ala Gln Leu Lys His His Ser Glu Asn Lys	20	25	30
Gly Leu Asp Lys Val Met Glu Thr Gln Ala Gln Val Asp Glu Leu Lys	35	40	45
Gly Ile Met Val Arg Asn Ile Asp Leu Val Ala Gln Arg Gly Glu Arg	50	55	60
Leu Glu Leu Leu Ile Asp Lys Thr Glu Asn Leu Val Asp Ser Ser Val	65	70	75
Thr Phe Lys Thr Thr Ser Arg Asn Leu Ala Arg Ala Met Cys Met Lys	85	90	95
Asn Leu Lys Leu Thr Ile Ile Ile Ile Ile Val Ser Ile Val Phe Ile	100	105	110
Tyr Ile Ile Val Ser Pro Leu Cys Gly Gly Phe Thr Trp Pro Ser Cys	115	120	125
Val Lys Lys	130		

&lt;210&gt; 5882

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (197)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5882

Asn Phe Gly Ile Lys Asp Lys Pro Thr Phe Ile Lys Gly Ile Gly Ala	1	5	10	15
Gly Gly Ser Ile Thr Gly Leu Lys Phe Asn Pro Leu Asn Thr Asn Gln	20	25	30	
Phe Tyr Ala Ser Ser Met Glu Gly Thr Thr Arg Leu Gln Asp Phe Lys	35	40	45	
Gly Asn Ile Leu Arg Val Phe Ala Ser Ser Asp Thr Ile Asn Ile Trp	50	55	60	

## 5169

Phe Cys Ser Leu Asp Val Ser Ala Ser Ser Arg Met Val Val Thr Gly  
 65 70 75 80  
 Asp Asn Val Gly Asn Val Ile Leu Leu Asn Met Asp Gly Lys Glu Leu  
 85 90 95  
 Trp Asn Leu Arg Met His Lys Lys Lys Val Thr His Val Ala Leu Asn  
 100 105 110  
 Pro Cys Cys Asp Trp Phe Leu Ala Thr Ala Ser Val Asp Gln Thr Val  
 115 120 125  
 Lys Ile Trp Asp Leu Arg Gln Val Arg Gly Lys Ala Ser Phe Leu Tyr  
 130 135 140  
 Ser Leu Pro His Arg His Pro Val Asn Ala Ala Cys Phe Ser Pro Asp  
 145 150 155 160  
 Gly Ala Arg Leu Leu Thr Thr Asp Gln Lys Ser Glu Ile Arg Val Tyr  
 165 170 175  
 Ser Ala Ser Gln Trp Asp Cys Pro Leu Gly Leu Ile Pro His Pro His  
 180 185 190  
 Arg His Phe Gln Xaa Leu Thr Pro Ile Lys Ala Ala Trp Asp Pro Arg  
 195 200 205  
 Tyr Asn Leu Ile Val Val Gly Arg Tyr Pro Asp Pro Asn Phe Lys Ser  
 210 215 220  
 Cys Thr  
 225

&lt;210&gt; 5883

&lt;211&gt; 484

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5883

Trp Leu Leu Arg Ser Pro Gly Lys Leu Thr Ala Arg Glu Arg Ile Ser  
 1 5 10 15

Leu Leu Leu Asp Pro Gly Ser Phe Xaa Glu Ser Asp Met Phe Val Glu  
 20 25 30

## 5170

His Arg Cys Ala Asp Phe Gly Met Ala Ala Asp Lys Asn Lys Phe Pro  
 35 40 45  
 Gly Asp Ser Val Val Thr Gly Arg Gly Arg Ile Asn Gly Arg Leu Val  
 50 55 60  
 Tyr Val Phe Ser Gln Asp Phe Thr Val Phe Gly Gly Ser Leu Ser Gly  
 65 70 75 80  
 Ala His Ala Gln Lys Ile Cys Lys Ile Met Asp Gln Ala Ile Thr Val  
 85 90 95  
 Gly Ala Pro Val Ile Gly Leu Asn Asp Ser Gly Gly Ala Arg Ile Gln  
 100 105 110  
 Glu Gly Val Glu Ser Leu Ala Gly Tyr Ala Asp Ile Phe Leu Arg Asn  
 115 120 125  
 Val Thr Ala Ser Gly Val Ile Pro Gln Ile Ser Leu Ile Met Gly Pro  
 130 135 140  
 Cys Ala Gly Gly Ala Val Tyr Ser Pro Ala Leu Thr Asp Phe Thr Phe  
 145 150 155 160  
 Met Val Lys Asp Thr Ser Tyr Leu Phe Ile Thr Gly Pro Asp Val Val  
 165 170 175  
 Lys Ser Val Thr Asn Glu Asp Val Thr Gln Glu Glu Leu Gly Gly Ala  
 180 185 190  
 Lys Thr His Thr Thr Met Ser Gly Val Ala His Arg Ala Phe Glu Asn  
 195 200 205  
 Asp Val Asp Ala Leu Cys Asn Leu Arg Asp Phe Phe Asn Tyr Leu Pro  
 210 215 220  
 Leu Ser Ser Gln Asp Pro Ala Pro Val Arg Glu Cys His Asp Pro Ser  
 225 230 235 240  
 Asp Arg Leu Val Pro Glu Leu Asp Thr Ile Val Pro Leu Glu Ser Thr  
 245 250 255  
 Lys Ala Tyr Asn Met Val Asp Ile Ile His Ser Val Val Asp Glu Arg  
 260 265 270  
 Glu Phe Phe Glu Ile Met Pro Asn Tyr Ala Lys Asn Ile Ile Val Gly  
 275 280 285  
 Phe Ala Arg Met Asn Gly Arg Thr Val Gly Ile Val Gly Asn Gln Pro  
 290 295 300



## 5171

Lys Val Ala Ser Gly Cys Leu Asp Ile Asn Ser Ser Val Lys Gly Ala  
 305 310 315 320  
 Arg Phe Val Arg Phe Cys Asp Ala Phe Asn Ile Pro Leu Ile Thr Phe  
 325 330 335  
 Val Asp Val Pro Gly Phe Leu Pro Gly Thr Ala Gln Glu Tyr Gly Gly  
 340 345 350  
 Ile Ile Arg His Gly Ala Lys Leu Leu Tyr Ala Phe Ala Glu Ala Thr  
 355 360 365  
 Val Pro Lys Val Thr Val Ile Thr Arg Lys Ala Tyr Gly Gly Ala Tyr  
 370 375 380  
 Asp Val Met Ser Ser Lys His Leu Cys Gly Asp Thr Asn Tyr Ala Trp  
 385 390 395 400  
 Pro Thr Ala Glu Ile Ala Val Met Gly Ala Lys Gly Ala Val Glu Ile  
 405 410 415  
 Ile Phe Lys Gly His Glu Asn Val Glu Ala Ala Gln Ala Glu Tyr Ile  
 420 425 430  
 Glu Lys Phe Ala Asn Pro Phe Pro Ala Ala Val Arg Gly Phe Val Asp  
 435 440 445  
 Asp Ile Ile Gln Pro Ser Ser Thr Arg Ala Arg Ile Cys Cys Asp Leu  
 450 455 460  
 Asp Val Leu Ala Ser Lys Lys Val Gln Arg Pro Trp Arg Lys His Ala  
 465 470 475 480  
 Asn Ile Pro Leu

&lt;210&gt; 5884

&lt;211&gt; 344

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (56)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

## 5172

&lt;222&gt; (62)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (110)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (325)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (327)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5884

Asn	Lys	Met	Lys	Ile	Phe	Ser	Glu	Ser	His	Lys	Thr	Val	Phe	Val	Val
1				5						10				15	

Asp	His	Cys	Pro	Tyr	Met	Ala	Glu	Ser	Cys	Arg	Gln	His	Val	Glu	Phe
			20					25					30		

Asp	Met	Leu	Val	Lys	Asn	Arg	Thr	Gln	Gly	Ile	Ile	Pro	Leu	Ala	Pro
		35					40					45			

Ile	Ser	Lys	Ser	Leu	Trp	Thr	Xaa	Ser	Val	Glu	Ser	Ser	Xaa	Glu	Tyr
	50					55					60				

Cys	Arg	Ile	Met	Tyr	Asp	Ile	Phe	Pro	Phe	Lys	Lys	Leu	Val	Asn	Phe
65					70					75				80	

Ile	Val	Ser	Asp	Ser	Gly	Ala	His	Val	Leu	Asn	Ser	Trp	Thr	Gln	Glu
				85						90				95	

Asp	Gln	Asn	Leu	Gln	Glu	Leu	Met	Ala	Ala	Leu	Ala	Ala	Xaa	Gly	Pro
			100					105					110		

Pro	Asn	Pro	Arg	Ala	Asp	Pro	Glu	Cys	Cys	Ser	Ile	Leu	His	Gly	Leu
		115					120					125			

Val	Ala	Ala	Val	Glu	Thr	Leu	Cys	Lys	Ile	Thr	Glu	Tyr	Gln	His	Glu
	130					135					140				

Ala	Arg	Thr	Leu	Leu	Met	Glu	Asn	Ala	Glu	Arg	Val	Gly	Asn	Arg	Gly
145					150					155					160

Arg	Ile	Ile	Cys	Ile	Thr	Asn	Ala	Lys	Ser	Asp	Ser	His	Val	Arg	Met
				165					170					175	

## 5173

Leu Glu Asp Cys Val Gln Glu Thr Ile His Glu His Asn Lys Leu Ala  
                   180                                  185                                  190  
 Ala Asn Ser Asp His Leu Met Gln Ile Gln Lys Cys Glu Leu Val Leu  
                   195                                  200                                  205  
 Ile His Thr Tyr Pro Val Gly Glu Asp Ser Leu Val Ser Asp Arg Ser  
                   210                                  215                                  220  
 Lys Lys Glu Leu Ser Pro Val Leu Thr Ser Glu Val His Ser Val Arg  
                   225                                  230                                  235                                  240  
 Ala Gly Arg His Leu Ala Thr Lys Leu Asn Ile Leu Val Gln Gln His  
                                   245                                  250                                  255  
 Phe Asp Leu Ala Ser Thr Thr Ile Thr Asn Ile Pro Met Lys Glu Glu  
                   260                                  265                                  270  
 Gln His Ala Asn Thr Ser Ala Asn Tyr Asp Val Glu Leu Leu His His  
                   275                                  280                                  285  
 Lys Asp Ala His Val Asp Phe Leu Lys Ser Gly Asp Ser His Leu Gly  
                   290                                  295                                  300  
 Gly Gly Ser Arg Glu Gly Ser Phe Lys Glu Thr Ile Thr Leu Lys Trp  
                   305                                  310                                  315                                  320  
 Cys Thr Pro Arg Xaa Lys Xaa Thr Leu Cys Phe Leu Leu Phe Gln Glu  
                                   325                                  330                                  335  
 Leu His Tyr Cys Thr Gly Ala Leu  
                   340

&lt;210&gt; 5885

&lt;211&gt; 365

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (155)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (171)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

5174

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (192)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5885

Pro Glu His Ser Trp Ser Ser Ser Ser Ser Thr Lys Arg Trp Thr Glu  
 1 5 10 15

Lys Thr Ala Glu Thr Met Gly Pro Pro Ser Ala Pro Pro Cys Arg Leu  
 20 25 30

His Val Pro Trp Lys Glu Val Leu Leu Thr Ala Ser Leu Leu Thr Phe  
 35 40 45

Trp Asn Pro Pro Thr Thr Ala Lys Leu Thr Ile Glu Ser Thr Pro Phe  
 50 55 60

Asn Val Ala Glu Gly Lys Glu Val Leu Leu Leu Ala His Asn Leu Pro  
 65 70 75 80

Gln Asn Arg Ile Gly Tyr Ser Trp Tyr Lys Gly Glu Arg Val Asp Gly  
 85 90 95

Asn Ser Leu Ile Val Gly Tyr Val Ile Gly Thr Gln Gln Ala Thr Pro  
 100 105 110

Gly Pro Ala Tyr Ser Gly Arg Glu Thr Ile Tyr Pro Asn Ala Ser Leu  
 115 120 125

Leu Ile Gln Asn Val Thr Gln Asn Asp Thr Gly Phe Tyr Thr Leu Gln  
 130 135 140

Val Ile Lys Ser Asp Leu Val Asn Glu Glu Xaa Thr Gly Gln Phe His  
 145 150 155 160

Val Tyr Pro Glu Leu Pro Lys Pro Ser Ile Xaa Ser Asn Asn Ser Asn  
 165 170 175

Pro Val Glu Asp Lys Asp Ala Val Ala Phe Thr Cys Glu Pro Glu Xaa  
 180 185 190

Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Gly Gln Ser Leu Pro Val  
 195 200 205

Ser Pro Arg Leu Gln Leu Ser Asn Gly Asn Met Thr Leu Thr Leu Leu  
 210 215 220

Ser Val Lys Arg Asn Asp Ala Gly Ser Tyr Glu Cys Glu Ile Gln Asn  
 225 230 235 240

Pro Ala Ser Ala Asn Arg Ser Asp Pro Val Thr Leu Asn Val Leu Tyr  
245 250 255

Gly Pro Asp Gly Pro Thr Ile Ser Pro Ser Lys Ala Asn Tyr Arg Pro  
260 265 270

Gly Glu Asn Leu Asn Leu Ser Cys His Ala Ala Ser Asn Pro Pro Ala  
275 280 285

Gln Tyr Ser Trp Phe Ile Asn Gly Thr Phe Gln Gln Ser Thr Gln Glu  
290 295 300

Leu Phe Ile Pro Asn Ile Thr Val Asn Asn Ser Gly Ser Tyr Met Cys  
305 310 315 320

Gln Ala His Asn Ser Ala Thr Gly Leu Asn Arg Thr Thr Val Thr Met  
325 330 335

Ile Thr Val Ser Gly Ser Ala Pro Val Leu Ser Ala Val Ala Thr Val  
340 345 350

Gly Ile Thr Ile Gly Val Leu Ala Arg Val Ala Leu Ile  
355 360 365

<210> 5886

<211> 93

<212> PRT

<213> Homo sapiens

<220>

&lt;221&gt; SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

&lt;221&gt; SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5886

Asp Pro Val Ser Glu Glu Gly Glu Gly Leu Ser Cys Xaa Asp Gln Xaa  
1 5 10 15

His Arg Asp Pro Leu Gly Arg Gly Ala Gly Arg Ala Lys Lys Arg Thr  
20 25 30

Cys Lys Gly Arg Arg Arg Asn Pro Asp Ala Ala Ser Glu Val Gln Ala  
35 40 45

## 5176

His Leu Val Asn Met His Cys His Glu Phe Leu Pro Asp Val Leu Leu  
 50 55 60

Phe Ser Phe Thr Tyr Ser Phe Asp Gln Ile Val Cys Gly Leu Asn Lys  
 65 70 75 80

Met Lys Ile Ser Ser Pro Leu Phe Leu Gly Asn Thr Leu  
 85 90

<210> 5887  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 5887

Leu Cys Glu Lys Trp Ala Gln Trp Pro Ser Pro Glu Ile Ser Phe Ile  
 1 5 10 15

Leu Gly Gln Glu Phe Asp Glu Val Thr Ala Asp Asp Arg Lys Val Lys  
 20 25 30

Ser Thr Ile Thr Leu Asp Gly Gly Val Leu Val His Val Gln Lys Trp  
 35 40 45

Asp Gly Lys Ser Thr Thr Ile Lys Arg Lys Arg Glu Asp Asp Lys Leu  
 50 55 60

Val Val Glu Cys Val Met Lys Gly Val Thr Ser Thr Arg Val Tyr Glu  
 65 70 75 80

Arg Ala

<210> 5888  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 5888

Asp Leu His Ser Gln Trp Gly Thr Trp Pro Pro Ile Leu Gly Asp Leu  
 1 5 10 15

Arg Lys Arg Thr Ser Pro Trp Gly Glu Gly Trp Val Gly Pro Glu Gly  
 20 25 30

Pro Val Pro Ser Ser Val Leu Arg Gly Arg Ala Thr Cys Ser Asn Gly  
 35 40 45

## 5177

Ile Cys Ile Leu Ala Pro Leu His Leu Leu Ser Pro Ala Glu Ser Phe  
 50 55 60

Pro Ser Lys Pro Lys Ser Cys His Cys Phe Phe Leu Pro Gly Lys Asn  
 65 70 75 80

Ala Trp Thr Leu Pro Gly Asp Arg Leu Lys Pro Glu Gln Cys His Thr  
 85 90 95

Leu Ala Leu Ile Pro Cys  
 100

<210> 5889  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 5889  
 Tyr Pro Leu Phe Thr Ile Met Leu Phe Glu Thr Lys Val Thr Met Tyr  
 1 5 10 15

Thr Ile Leu Leu Glu Glu Val Phe Asp Arg Lys Ser Asn Ile Met Ser  
 20 25 30

Phe Ile Asn Phe Leu Val Leu Lys Lys Ala Val Ile Tyr Ile Tyr Lys  
 35 40 45

Leu Cys Lys  
 50

<210> 5890  
 <211> 239  
 <212> PRT  
 <213> Homo sapiens

<400> 5890  
 Glu Tyr Gly Ser Pro Ser Val Ile Ser Val Ser Lys Gly Ser Pro Asp  
 1 5 10 15

Gly Ser His Pro Val Val Val Ala Pro Tyr Asn Gly Gly Pro Pro Arg  
 20 25 30

Thr Cys Pro Lys Ile Lys Gln Glu Ala Val Ser Ser Cys Thr His Leu  
 35 40 45

Gly Ala Gly Pro Pro Leu Ser Asn Gly His Arg Pro Ala Ala His Asp

## 5178

50                                      55                                      60  
 Phe Pro Leu Gly Arg Gln Leu Pro Ser Arg Thr Thr Pro Thr Leu Gly  
 65                                      70                                      75                                      80  
 Leu Glu Glu Val Leu Ser Ser Arg Asp Cys His Pro Ala Leu Pro Leu  
                                     85                                      90                                      95  
 Pro Pro Gly Phe His Pro His Pro Gly Pro Asn Tyr Pro Ser Phe Leu  
                                     100                                      105                                      110  
 Pro Asp Gln Met Gln Pro Gln Val Pro Pro Leu His Tyr Gln Glu Leu  
                                     115                                      120                                      125  
 Met Pro Pro Gly Ser Cys Met Pro Glu Glu Pro Lys Pro Lys Arg Gly  
                                     130                                      135                                      140  
 Arg Arg Ser Trp Pro Arg Lys Arg Thr Ala Thr His Thr Cys Asp Tyr  
 145                                      150                                      155                                      160  
 Ala Gly Cys Gly Lys Thr Tyr Thr Lys Ser Ser His Leu Lys Ala His  
                                     165                                      170                                      175  
 Leu Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Asp Trp Asp Gly  
                                     180                                      185                                      190  
 Cys Gly Trp Lys Phe Ala Arg Ser Asp Glu Leu Thr Arg His Tyr Arg  
                                     195                                      200                                      205  
 Lys His Thr Gly His Arg Pro Phe Gln Cys Gln Lys Cys Asp Arg Ala  
                                     210                                      215                                      220  
 Phe Ser Arg Ser Asp His Leu Ala Leu His Met Lys Arg His Phe  
 225                                      230                                      235

&lt;210&gt; 5891

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5891

Leu Val Pro Asn Ser Ala Arg Val Gly Thr Arg Ser Lys Gly Val Cys  
 1                                      5                                      10                                      15  
 Val His Gly Asn Ala Glu Tyr Gln Pro Gly Ser Pro Val Tyr Ser Ser  
                                     20                                      25                                      30  
 Lys Cys Gln Asp Cys Val Cys Thr Asp Lys Val Asp Asn Asn Thr Leu  
                                     35                                      40                                      45



## 5179

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Leu Asn Val Ile Ala Cys Thr His Val Pro Cys Asn Thr Ser Cys Ser
   50                               55                               60

Pro Gly Phe Glu Leu Met Glu Ala Pro Gly Glu Cys Cys Lys Lys Cys
   65                               70                               75                               80

Glu Gln Thr His Cys Ile Ile Lys Arg Pro Asp Asn Gln His Val Ile
                               85                               90                               95

Leu Lys Pro Gly Asp Phe Lys Ser Asp Pro Lys Asn Asn Cys Thr Phe
                               100                               105                               110

Phe Ser Cys Val Lys Ile His Asn Gln Leu Ile Ser Ser Val Ser Asn
                               115                               120                               125

Ile Thr Cys Pro Asn Phe Asp Ala Ser Ile Cys Ile Pro Gly Ser Ile
                               130                               135                               140

Thr Phe Met Pro Asn Gly Cys Cys Lys Thr Cys Thr Pro Arg Asn Glu
   145                               150                               155                               160

Thr Arg Val Pro Cys Ser Thr Val Pro Val Thr Thr Glu Val Ser Tyr
                               165                               170                               175

Ala Gly Cys Thr Lys Thr Val Leu Met Asn His Cys Ser Gly Ser Cys
                               180                               185                               190

Gly Thr Phe Val Met Tyr Ser Ala Lys Ala Gln Ala Leu Asp His Ser
                               195                               200                               205

Cys Ser Cys Cys Lys Glu Glu Lys Thr Ser Gln Arg Glu Val Val Leu
   210                               215                               220

Ser Cys Pro Asn Gly Gly Ser Leu Thr His Thr Tyr Thr His Ile Glu
   225                               230                               235                               240

Ser Cys Gln Cys Gln Asp Thr Val Cys Gly Leu Pro Thr Gly Thr Ser
                               245                               250                               255

Arg Arg Ala Arg Arg Ser Pro Arg His Leu Gly Ser Gly
                               260                               265

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&lt;210&gt; 5892

&lt;211&gt; 227

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

## 5180

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5892

Ala	Cys	His	Glu	Lys	Val	Val	Asn	Ile	Gln	Lys	Asp	Pro	Gly	Glu	Ser
1				5					10					15	

Leu	Gly	Met	Thr	Val	Ala	Gly	Gly	Ala	Ser	His	Arg	Xaa	Trp	Asp	Leu
			20					25						30	

Pro	Ile	Tyr	Val	Ile	Ser	Val	Glu	Pro	Gly	Gly	Val	Ile	Ser	Arg	Asp
		35					40						45		

Gly	Arg	Ile	Lys	Thr	Gly	Asp	Ile	Leu	Leu	Asn	Val	Asp	Gly	Val	Glu
	50					55					60				

Leu	Thr	Glu	Val	Ser	Arg	Ser	Glu	Ala	Val	Ala	Leu	Leu	Lys	Arg	Thr
65					70					75					80

Ser	Ser	Ser	Ile	Val	Leu	Lys	Ala	Leu	Glu	Val	Lys	Glu	Tyr	Glu	Pro
				85					90					95	

Gln	Glu	Asp	Cys	Ser	Ser	Pro	Ala	Ala	Leu	Asp	Ser	Asn	His	Asn	Met
			100					105						110	

Ala	Pro	Pro	Ser	Asp	Trp	Ser	Pro	Ser	Trp	Val	Met	Trp	Leu	Glu	Leu
		115					120						125		

Pro	Arg	Cys	Leu	Tyr	Asn	Cys	Lys	Asp	Ile	Val	Leu	Arg	Arg	Asn	Thr
	130					135						140			

Ala	Gly	Ser	Leu	Gly	Phe	Cys	Ile	Val	Gly	Gly	Tyr	Glu	Glu	Tyr	Asn
145					150					155					160

Gly	Asn	Lys	Pro	Phe	Phe	Ile	Lys	Ser	Ile	Val	Glu	Gly	Thr	Pro	Ala
				165						170					175

Tyr	Asn	Asp	Gly	Arg	Ile	Arg	Cys	Gly	Asp	Ile	Leu	Leu	Ala	Val	Asn
			180					185						190	

Gly	Arg	Ser	Thr	Ser	Gly	Met	Ile	His	Ala	Cys	Leu	Ala	Arg	Leu	Leu
		195					200						205		

Lys	Glu	Leu	Lys	Gly	Arg	Ile	Thr	Leu	Thr	Ile	Val	Ser	Trp	Pro	Gly
	210					215									220

Thr	Phe	Leu
225		

5181

&lt;210&gt; 5893

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5893

Ser Ser His Phe Tyr Ala Lys Gln Glu Xaa Ser Ile Thr Leu Val Leu  
 1 5 10 15

Met Tyr Thr Leu His Phe Asp Lys Ile Asn Phe Val Val Ser Phe Glu  
 20 25 30

Val Asp Arg Cys Val Val Val Leu Leu His Phe Leu Leu Phe Cys Val  
 35 40 45

Trp Ser Cys Ile Pro Glu Thr Asn Glu Ala Leu Gly Tyr Phe Ile Lys  
 50 55 60

Cys Ser Asp Cys Gln Gln Arg Ala Gly Phe Leu Phe Leu Cys Cys Gly  
 65 70 75 80

Val Asn Arg Thr Met Val Trp Glu  
 85

&lt;210&gt; 5894

&lt;211&gt; 571

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5894

Arg Val Arg Ser Lys Val Pro Arg Cys Val Asn Thr Gln Pro Gly Phe  
 1 5 10 15

His Cys Leu Pro Cys Pro Pro Arg Tyr Arg Gly Asn Gln Pro Val Gly  
 20 25 30

Val Gly Leu Glu Ala Ala Lys Thr Glu Lys Gln Val Cys Glu Pro Glu  
 35 40 45

Asn Pro Cys Lys Asp Lys Thr His Asn Cys His Lys His Ala Glu Cys  
 50 55 60

Ile Tyr Leu Gly His Phe Ser Asp Pro Met Tyr Lys Cys Glu Cys Gln

## 5182

65		70		75		80
Thr Gly Tyr Ala Gly Asp Gly Leu Ile Cys Gly Glu Asp Ser Asp Leu						
	85			90		95
Asp Gly Trp Pro Asn Leu Asn Leu Val Cys Ala Thr Asn Ala Thr Tyr						
	100		105			110
His Cys Ile Lys Asp Asn Cys Pro His Leu Pro Asn Ser Gly Gln Glu						
	115		120			125
Asp Phe Asp Lys Asp Gly Ile Gly Asp Ala Cys Asp Asp Asp Asp Asp						
	130		135			140
Asn Asp Gly Val Thr Asp Glu Lys Asp Asn Cys Gln Leu Leu Phe Asn						
	145		150			155
Pro Arg Gln Ala Asp Tyr Asp Lys Asp Glu Val Gly Asp Arg Cys Asp						
		165		170		175
Asn Cys Pro Tyr Val His Asn Pro Ala Gln Ile Asp Thr Asp Asn Asn						
		180		185		190
Gly Glu Gly Asp Ala Cys Ser Val Asp Ile Asp Gly Asp Asp Val Phe						
	195		200			205
Asn Glu Arg Asp Asn Cys Pro Tyr Val Tyr Asn Thr Asp Gln Arg Asp						
	210		215			220
Thr Asp Gly Asp Gly Val Gly Asp His Cys Asp Asn Cys Pro Leu Val						
	225		230			235
His Asn Pro Asp Gln Thr Asp Val Asp Asn Asp Leu Val Gly Asp Gln						
		245		250		255
Cys Asp Asn Asn Glu Asp Ile Asp Asp Asp Gly His Gln Asn Asn Gln						
		260		265		270
Asp Asn Cys Pro Tyr Ile Ser Asn Ala Asn Gln Ala Asp His Asp Arg						
		275		280		285
Asp Gly Gln Gly Asp Ala Cys Asp Pro Asp Asp Asp Asn Asp Gly Val						
	290		295			300
Pro Asp Asp Arg Asp Asn Cys Arg Leu Val Phe Asn Pro Asp Gln Glu						
	305		310			315
Asp Leu Asp Gly Asp Gly Arg Gly Asp Ile Cys Lys Asp Asp Phe Asp						
		325		330		335
Asn Asp Asn Ile Pro Asp Ile Asp Asp Val Cys Pro Glu Asn Asn Ala						

## 5183

340					345					350					
Ile	Ser	Glu	Thr	Asp	Phe	Arg	Asn	Phe	Gln	Met	Val	Pro	Leu	Asp	Pro
		355					360					365			
Lys	Gly	Thr	Thr	Gln	Ile	Asp	Pro	Asn	Trp	Val	Ile	Arg	His	Gln	Gly
	370					375					380				
Lys	Glu	Leu	Val	Gln	Thr	Ala	Asn	Ser	Asp	Pro	Gly	Ile	Ala	Val	Gly
385					390					395					400
Phe	Asp	Glu	Phe	Gly	Ser	Val	Asp	Phe	Ser	Gly	Thr	Phe	Tyr	Val	Asn
				405					410					415	
Thr	Asp	Arg	Asp	Asp	Asp	Tyr	Ala	Gly	Phe	Val	Phe	Gly	Tyr	Gln	Ser
			420					425					430		
Ser	Ser	Arg	Phe	Tyr	Val	Val	Met	Trp	Lys	Gln	Val	Thr	Gln	Thr	Tyr
		435					440					445			
Trp	Glu	Asp	Gln	Pro	Thr	Arg	Ala	Tyr	Gly	Tyr	Ser	Gly	Val	Ser	Leu
	450					455					460				
Lys	Val	Val	Asn	Ser	Thr	Thr	Gly	Thr	Gly	Glu	His	Leu	Arg	Asn	Ala
465					470					475					480
Leu	Trp	His	Thr	Gly	Asn	Thr	Pro	Gly	Gln	Val	Arg	Thr	Leu	Trp	His
				485					490					495	
Asp	Pro	Arg	Asn	Ile	Gly	Trp	Lys	Asp	Tyr	Thr	Ala	Tyr	Arg	Trp	His
			500					505					510		
Leu	Thr	His	Arg	Pro	Lys	Thr	Gly	Tyr	Ile	Arg	Val	Leu	Val	His	Glu
		515					520					525			
Gly	Lys	Gln	Val	Met	Ala	Asp	Ser	Gly	Pro	Ile	Tyr	Asp	Gln	Thr	Tyr
	530					535					540				
Ala	Gly	Gly	Arg	Leu	Gly	Leu	Phe	Val	Phe	Ser	Gln	Glu	Met	Val	Tyr
545					550					555					560
Phe	Ser	Asp	Leu	Lys	Tyr	Glu	Cys	Arg	Asp	Ile					
			565						570						

&lt;210&gt; 5895

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

## 5184

&lt;400&gt; 5895

Asn Phe Leu Asn Glu Met Ile Asn Arg Trp Asn Leu Lys Tyr Ile Leu  
 1 5 10 15

Leu Gln Lys Arg Phe Leu Ser Leu Leu Tyr Phe Asp Asp Cys Phe Leu  
 20 25 30

Lys Ile Lys Ile Cys Ser Cys Ser Phe Ile Arg Leu Phe Lys Leu Cys  
 35 40 45

Phe Pro Leu Ile Phe Phe His His Cys Ile Tyr  
 50 55

&lt;210&gt; 5896

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5896

Arg Pro Thr Arg Pro Ser Arg Asp Cys Glu Gly Glu Arg Ser Lys Pro  
 1 5 10 15

Arg Arg Arg Trp Lys Gly Trp Arg Thr His Leu Asn Met Trp Asn Pro  
 20 25 30

Asn Ala Gly Gln Pro Gly Pro Asn Pro Tyr Pro Pro Asn Ile Gly Cys  
 35 40 45

Pro Gly Gly Ser Asn Pro Ala His Pro Pro Pro Ile Asn Pro Pro Phe  
 50 55 60

Pro Pro Gly Pro Cys Pro Pro Pro Gly Ala Pro His Gly Asn Pro  
 65 70 75 80

Ala Phe Pro Pro Gly Gly Pro Pro His Pro Val Pro Gln Pro Gly Tyr  
 85 90 95

Pro Gly Cys Gln Pro Leu Gly Pro Tyr Pro Pro Pro Tyr Pro Pro Pro  
 100 105 110

Ala Pro Gly Ile Pro Pro Val Asn Pro Leu Ala Pro Gly Met Val Gly  
 115 120 125

Pro Ala Val Ile Val Asp Lys Lys Met Gln Lys Lys Met Lys Lys Ala  
 130 135 140

His Lys Lys Met His Lys His Gln Lys His His Lys Tyr His Lys His  
 145 150 155 160

## 5185

Gly Lys His Ser Ser Ser Ser Ser Ser Ser Ser Ser Asp Ser Asp  
165 170 175

```
<210> 5897
<211> 205
<212> PRT
<213> Homo sapiens
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<400> 5897  
Leu Gly Gly Cys Arg Asp Val Pro Ser Leu Thr Leu Leu Ser Thr Val  
1 5 10 15

Ala Gly Ala Leu Ile Ala Asp Phe Leu Ser Gly Leu Val His Trp Gly  
20 25 30

Ala Asp Thr Trp Gly Ser Val Glu Leu Pro Ile Val Gly Lys Ala Phe  
35 40 45

Ile Arg Pro Phe Arg Glu His His Ile Asp Pro Thr Ala Ile Thr Arg  
50 55 60

His Asp Phe Ile Glu Thr Asn Gly Asp Asn Cys Leu Val Thr Leu Leu  
65 70 75 80

Pro Leu Leu Asn Met Ala Tyr Lys Phe Arg Thr His Ser Pro Glu Ala  
85 90 95

Leu Glu Gln Leu Tyr Pro Trp Glu Cys Phe Val Phe Cys Leu Ile Ile  
100 105 110

Phe Gly Thr Phe Thr Asn Gln Ile His Lys Trp Ser His Thr Tyr Phe  
115 120 125

Gly Leu Pro Arg Trp Val Thr Leu Leu Gln Asp Trp His Val Ile Leu  
130 135 140

Pro Arg Lys His His Arg Ile His His Val Ser Pro His Glu Thr Tyr  
145 150 155 160

Phe Cys Ile Thr Thr Gly Trp Leu Asn Tyr Pro Leu Glu Lys Ile Gly  
165 170 175

Phe Trp Arg Arg Leu Glu Asp Leu Ile Gln Gly Leu Thr Gly Glu Lys  
180 185 190

Pro Arg Ala Asp Asp Met Lys Trp Ala Gln Lys Ile Lys

5186

195

200

205

&lt;210&gt; 5898

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5898

Lys	Trp	Leu	Leu	Val	Asn	Phe	Asp	Cys	Ser	Ala	Met	Trp	Val	Lys	Lys
1				5					10					15	

Arg	Thr	Asp	Leu	Thr	Gly	Ala	Phe	Arg	Leu	Asp	Pro	Thr	Tyr	Leu	Lys
			20					25					30		

His	Ser	His	Gln	Asp	Ser	Gly	Leu	Ile	Thr	Asp	Tyr	Arg	His	Trp	Gln
		35					40					45			

Ile	Pro	Leu	Gly	Arg	Arg	Phe	Arg	Ser	Leu	Lys	Met	Trp	Phe	Val	Phe
	50					55					60				

Arg	Met	Tyr	Gly	Val	Lys	Gly	Leu	Gln	Ala	Tyr	Ile	Arg	Lys	His	Val
65					70					75					80

Gln	Leu	Ser	Xaa	Xaa	Phe	Glu	Ser	Leu	Val	Arg	Gln	Gly	Ser	Pro	Leu
			85						90					95	

&lt;210&gt; 5899

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)



5187

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5899

Leu Xaa His Pro Phe Ala Val Thr Ser Tyr Gly Lys Asn Leu Tyr Phe  
 1                      5                      10                      15

Thr Asp Trp Lys Met Asn Ser Val Val Ala Leu Asp Leu Ala Ile Ser  
                     20                      25                      30

Lys Glu Thr Asp Ala Phe Gln Pro His Lys Gln Thr Arg Leu Tyr Gly  
                     35                      40                      45

Ile Thr Thr Ala Leu Ser Gln Cys Pro Gln Gly His Asn Tyr Cys Ser  
                     50                      55                      60

Val Asn Asn Gly Gly Cys Thr His Leu Cys Leu Ala Thr Pro Gly Ser  
                     65                      70                      75                      80

Arg Thr Cys Arg Cys Pro Asp Asn Thr Leu Gly Val Asp Cys Ile Glu  
                     85                      90                      95

Gln Lys

&lt;210&gt; 5900

&lt;211&gt; 48

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5900

Glu Ile Ser Ala Phe Leu Ile Ser Ser Asn Tyr Lys Arg Thr Ala Val  
 1                      5                      10                      15

Phe Phe His Thr His Leu Pro Glu Gly Arg Ile Gly Ser His Ile Tyr  
                     20                      25                      30

Val Tyr Glu Arg Lys Leu Lys Gly Lys Phe Asn Met Lys Met Lys Phe  
                     35                      40                      45

&lt;210&gt; 5901

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

5188

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5901

Ser	Ser	Leu	Gly	Lys	Leu	Asp	His	Gln	Xaa	Phe	Ser	Leu	Asp	Arg	Val
1				5					10					15	

Ser	Leu	Val	Asn	Lys	Gly	Asp	Thr	Gly	Asn	Pro	Glu	Trp	Thr	Val	Ile
			20					25						30	

Cys	Val	Gly	Xaa	His	Ser	Gly	Ser	Gly	Ala	Ser	Asp	Thr	Leu	Xaa	Pro
		35					40					45			

Lys	Thr	Ala	Pro	Ser	Phe	Arg	Leu	Ala	Tyr	Glu	Met	Met	Phe	Met	Cys
	50					55					60				

Phe	Leu	Glu	Thr	Arg	Trp	Lys	Glu	Arg	Gly	Arg	Ile	Asn	Phe	Leu	Ile
65					70				75						80

Leu	Leu	Leu	Leu	Asn	Val	Met
				85		

&lt;210&gt; 5902

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5902

Leu	Asn	Trp	Leu	Leu	Gln	Gly	Glu	Gly	Gln	Lys	Ala	Arg	Pro	Ser	Ala
1				5					10					15	

Leu	Glu	Ser	Arg	Pro	Glu	Val	Ser	Gly	Lys	Leu	Thr	Leu	Lys	Met	Asp
			20					25					30		

Thr	Pro	Gln	Pro	Ala	Leu	Pro	Phe	Gly	Leu	Pro	Arg	Ile	Ser	Phe	Ser
		35					40					45			

## 5189

Gly Cys Ser His Thr Cys Ala Ile Thr Ser Ser Ser Met Thr Trp Thr  
 50 55 60

Gly Thr Ser Leu Thr Ile Pro Ile Gly Ile Thr Arg Ala Thr Asn Tyr  
 65 70 75 80

Ala Val Phe

<210> 5903

<211> 269

<212> PRT

<213> Homo sapiens

<400> 5903

Arg Arg Cys Cys His Ser Ala Thr Met Phe Glu Ala Arg Leu Val Gln  
 1 5 10 15

Gly Ser Ile Leu Lys Lys Val Leu Glu Ala Leu Lys Asp Leu Ile Asn  
 20 25 30

Glu Ala Cys Trp Asp Ile Ser Ser Ser Gly Val Asn Leu Gln Ser Met  
 35 40 45

Asp Ser Ser His Val Ser Leu Val Gln Leu Thr Leu Arg Ser Glu Gly  
 50 55 60

Phe Asp Thr Tyr Arg Cys Asp Arg Asn Leu Ala Met Gly Val Asn Leu  
 65 70 75 80

Thr Ser Met Ser Lys Ile Leu Lys Cys Ala Gly Asn Glu Asp Ile Ile  
 85 90 95

Thr Leu Arg Ala Glu Asp Asn Ala Asp Thr Leu Ala Leu Val Phe Glu  
 100 105 110

Ala Pro Asn Gln Glu Lys Val Ser Asp Tyr Glu Met Lys Leu Met Asp  
 115 120 125

Leu Asp Val Glu Gln Leu Gly Ile Pro Glu Gln Glu Tyr Ser Cys Val  
 130 135 140

Val Lys Met Pro Ser Gly Glu Phe Ala Arg Ile Cys Arg Asp Leu Ser  
 145 150 155 160

His Ile Gly Asp Ala Val Val Ile Ser Cys Ala Lys Asp Gly Val Lys  
 165 170 175

Phe Ser Ala Ser Gly Glu Leu Gly Asn Gly Asn Ile Lys Leu Ser Gln

## 5190

180	185	190
Thr Ser Asn Val Asp Lys Glu Glu Glu Ala Val Thr Ile Glu Met Asn		
195	200	205
Glu Pro Val Gln Leu Thr Phe Ala Leu Arg Tyr Leu Asn Phe Phe Thr		
210	215	220
Lys Ala Thr Pro Leu Ser Ser Thr Val Thr Leu Ser Met Ser Ala Asp		
225	230	235
Val Pro Leu Val Val Glu Tyr Lys Ile Ala Asp Met Gly His Leu Lys		
245	250	255
Tyr Tyr Leu Ala Pro Lys Ile Glu Asp Glu Glu Gly Ser		
260	265	

&lt;210&gt; 5904

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5904

Asn Lys Met Lys Lys Val Arg Leu Lys Glu Leu Glu Ser Arg Leu Gln		
1	5	10
Gln Val Asp Gly Phe Glu Lys Pro Lys Leu Leu Leu Glu Gln Tyr Pro		
20	25	30
Thr Arg Pro His Ile Ala Ala Cys Met Leu Tyr Thr Ile His Asn Thr		
35	40	45
Tyr Asp Asp Ile Glu Asn Lys Val Val Ala Asp Leu Gly Cys Gly Cys		
50	55	60
Gly Val Leu Ser Ile Gly Thr Ala Met Leu Gly Ala Gly Leu Cys Val		
65	70	75
Gly Phe Asp Ile Asp Glu Asp Ala Leu Glu Ile Phe Asn Arg Asn Ala		
85	90	95
Glu Glu Phe Glu Leu Thr Asn Ile Asp Met Val Gln Cys Asp Val Cys		
100	105	110
Leu Leu Ser Asn Arg Met Ser Lys Ser Phe Asp Thr Val Ile Met Asn		
115	120	125
Pro Pro Phe Gly Thr Lys Asn Asn Lys Gly Thr Asp Met Ala Phe Leu		
130	135	140

## 5191

Lys Thr Ala Leu Glu Met Ala Arg Thr Ala Val Tyr Ser Leu His Lys  
 145 150 155 160

Ser Ser Thr Arg Glu His Val Gln Lys Lys Ala Ala Glu Trp Lys Ile  
 165 170 175

Lys Ile Asp Ile Ile Ala Glu Leu Arg Tyr Asp Leu Pro Ala Ser Tyr  
 180 185 190

Lys Phe His Lys Lys Lys Ser Val Asp Ile Glu Val Asp Leu Ile Arg  
 195 200 205

Phe Ser Phe  
 210

<210> 5905

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5905

Lys Phe Leu Leu Lys Val Asn Phe Pro Glu Asn Gly Phe Leu Ser Pro  
 1 5 10 15

Asp Lys Leu Ser Leu Leu Glu Lys Leu Leu Pro Glu Arg Lys Glu Val  
 20 25 30

Glu Glu Thr Asp Glu Met Asp Gln Val Glu Leu Val Asp Phe Asp Pro  
 35 40 45

Asn Gln Glu Arg Arg Arg His Tyr Asn Gly Glu Ala Tyr Glu Asp Asp  
 50 55 60

Glu His His Pro Arg Gly Gly Val Gln Cys Gln Thr Ser  
 65 70 75

<210> 5906

<211> 142

<212> PRT

<213> Homo sapiens

<400> 5906

Ser Trp Glu Thr Glu Lys Met Gln Thr Ala Gly Ala Leu Phe Ile Ser  
 1 5 10 15

Pro Ala Leu Ile Arg Cys Cys Thr Arg Gly Leu Ile Arg Pro Val Ser

## 5192

	20		25		30
Ala Ser Phe Leu Asn Ser Pro Val Asn Ser Ser Lys Gln Pro Ser Tyr					
	35		40		45
Ser Asn Phe Pro Leu Gln Val Ala Arg Arg Glu Phe Gln Thr Ser Val					
	50		55		60
Val Ser Arg Asp Ile Asp Thr Ala Ala Lys Phe Ile Gly Ala Gly Ala					
	65		70		75
					80
Ala Thr Val Gly Val Ala Gly Ser Gly Ala Gly Ile Gly Thr Val Phe					
		85		90	
					95
Gly Ser Leu Ile Ile Gly Tyr Ala Arg Asn Pro Ser Leu Lys Gln Gln					
	100		105		110
Leu Phe Ser Tyr Ala Ile Leu Gly Phe Ala Leu Ser Glu Ala Met Gly					
	115		120		125
Leu Phe Cys Leu Met Val Ala Phe Leu Ile Leu Phe Ala Met					
	130		135		140

&lt;210&gt; 5907

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (36)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5907

Thr Cys Pro Phe Leu Gln Glu Phe Ser Leu Gly Met Trp Ser Cys Leu					
1		5		10	15
His Ala Val Leu Glu Leu Ile Asp Ser Gln Gln Gln Asp Arg Tyr Trp					
	20		25		30
Cys Pro Pro Xaa Leu His Arg Ala Ala Ile Ala Phe Leu His Ala Leu					
	35		40		45
Trp Gln Asp Arg Arg Asp Ser Ala Met Leu Val Leu Arg Thr Lys					
	50		55		60

&lt;210&gt; 5908

## 5193

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5908

Arg Asn Lys Gly Val Arg Ala Asn Ile Gln Gln Leu Leu Ser Pro Val  
 1 5 10 15

Met Lys Phe Ile Gln Thr Lys Asp Gly Met Ser Leu Tyr Ile Ile Pro  
 20 25 30

Cys Asn Lys Tyr Ser Val Lys Leu Cys Trp Cys Asn Leu Thr Cys Phe  
 35 40 45

Cys Gln Ser Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 50 55 60

&lt;210&gt; 5909

&lt;211&gt; 466

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5909

Val Ser Pro Arg Ala Gly Gly Ala Gly Asn Asn Arg Gly Arg Ala His  
 1 5 10 15

Arg Ala Ser Ser Cys Ser Leu Pro Ala Pro Pro Ala Thr Leu Asp Pro  
 20 25 30

Arg Ile Pro Pro Ala Arg Leu Pro Ala Met Ala Asp Lys Glu Ala Ala  
 35 40 45

Phe Asp Asp Ala Val Glu Glu Arg Val Ile Asn Glu Glu Tyr Lys Ile  
 50 55 60

Trp Lys Lys Asn Thr Pro Phe Leu Tyr Asp Leu Val Met Thr His Ala  
 65 70 75 80

Leu Glu Trp Pro Ser Leu Thr Ala Gln Trp Leu Pro Asp Val Thr Arg  
 85 90 95

Pro Glu Gly Lys Asp Phe Ser Ile His Arg Leu Val Leu Gly Thr His  
 100 105 110

Thr Ser Asp Glu Gln Asn His Leu Val Ile Ala Ser Val Gln Leu Pro  
 115 120 125

Asn Asp Asp Ala Gln Phe Asp Ala Ser His Tyr Asp Ser Glu Lys Gly  
 130 135 140

## 5194

Glu Phe Gly Gly Phe Gly Ser Val Ser Gly Lys Ile Glu Ile Glu Ile															
145				150					155						160
Lys Ile Asn His Glu Gly Glu Val Asn Arg Ala Arg Tyr Met Pro Gln				165				170						175	
Asn Pro Cys Ile Ile Ala Thr Lys Thr Pro Ser Ser Asp Val Leu Val				180				185						190	
Phe Asp Tyr Thr Lys His Pro Ser Lys Pro Asp Pro Ser Gly Glu Cys				195			200					205			
Asn Pro Asp Leu Arg Leu Arg Gly His Gln Lys Glu Gly Tyr Gly Leu				210			215					220			
Ser Trp Asn Pro Asn Leu Ser Gly His Leu Leu Ser Ala Ser Asp Asp				225			230				235				240
His Thr Ile Cys Leu Trp Asp Ile Ser Ala Val Pro Lys Glu Gly Lys				245				250						255	
Val Val Asp Ala Lys Thr Ile Phe Thr Gly His Thr Ala Val Val Glu				260				265						270	
Asp Val Ser Trp His Leu Leu His Glu Ser Leu Phe Gly Ser Val Ala				275				280				285			
Asp Asp Gln Lys Leu Met Ile Trp Asp Thr Arg Ser Asn Asn Thr Ser				290			295				300				
Lys Pro Ser His Ser Val Asp Ala His Thr Ala Glu Val Asn Cys Leu				305			310				315				320
Ser Phe Asn Pro Tyr Ser Glu Phe Ile Leu Ala Thr Gly Ser Ala Asp				325				330						335	
Lys Thr Val Ala Leu Trp Asp Leu Arg Asn Leu Lys Leu Lys Leu His				340				345						350	
Ser Phe Glu Ser His Lys Asp Glu Ile Phe Gln Val Gln Trp Ser Pro				355				360						365	
His Asn Glu Thr Ile Leu Ala Ser Ser Gly Thr Asp Arg Arg Leu Asn				370			375					380			
Val Trp Asp Leu Ser Lys Ile Gly Glu Glu Gln Ser Pro Glu Asp Ala				385			390				395				400
Glu Asp Gly Pro Pro Glu Leu Leu Phe Ile His Gly Gly His Thr Ala				405				410						415	



## 5195

Lys Ile Ser Asp Phe Ser Trp Asn Pro Asn Glu Pro Trp Val Ile Cys  
 420 425 430

Ser Val Ser Glu Asp Asn Ile Met Gln Val Trp Gln Met Ala Glu Asn  
 435 440 445

Ile Tyr Asn Asp Glu Asp Pro Glu Gly Ser Val Asp Pro Glu Gly Gln  
 450 455 460

Gly Ser  
 465

<210> 5910

<211> 67

<212> PRT

<213> Homo sapiens

<400> 5910

Leu Leu Pro His Pro Phe Ser Cys Val His Val Ala Phe Ser Asn Pro  
 1 5 10 15

Gly Gln Trp Phe Leu Pro Arg Pro Cys Thr Glu Ala Gly Cys Leu Pro  
 20 25 30

Asp Pro Arg Arg Val Arg Glu Gly Arg Gly Ile Leu Leu Leu Glu Leu  
 35 40 45

Gln Ala Leu Ala Glu Ala Val Ser His Thr Val Val Ser Ser Ala Trp  
 50 55 60

Ala Gly Thr  
 65

<210> 5911

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5911

Glu Ile Ile Thr Asp Arg Gln Ser Gly Lys Lys Arg Gly Phe Gly Phe  
 1 5 10 15

Val Thr Phe Asp Asp His Asp Pro Val Asp Lys Ile Val Leu Gln Lys  
 20 25 30

Tyr His Thr Ile Asn Gly His Asn Ala Glu Val Arg Lys Ala Leu Ser

## 5196

35                      40                      45  
 Arg Gln Glu Met Gln Glu Val Gln Ser Ser Arg Ser Gly Arg Gly Gly  
     50                      55                      60  
 Asn Phe Gly Phe Gly Asp Ser Arg Gly Gly Gly Gly Asn Phe Gly Pro  
     65                      70                      75                      80  
 Gly Pro Gly Ser Asn Phe Arg Gly Gly Ser Asp Gly Tyr Gly Ser Gly  
                     85                      90                      95  
 Arg Gly Phe Gly Asp Gly Tyr Asn Gly Tyr Gly Gly Gly Pro Gly Gly  
                     100                      105                      110  
 Gly Asn Phe Gly Gly Ser Pro Gly Tyr Gly Gly Gly Arg Gly Gly Tyr  
                     115                      120                      125  
 Gly Gly Gly Gly Pro Gly Tyr Gly Asn Gln Gly Gly Gly Tyr Gly Gly  
                     130                      135                      140  
 Gly Tyr Asp Asn Tyr Gly Gly Gly Asn Tyr Gly Ser Gly Asn Tyr Asn  
     145                      150                      155                      160  
 Asp Phe Gly Asn Tyr Asn Gln Gln Pro Ser Asn Tyr Gly Pro Met Lys  
                     165                      170                      175  
 Ser Gly Asn Phe Gly Gly Ser Arg Asn Met Gly Gly Pro Tyr Gly Gly  
                     180                      185                      190  
 Gly Asn Tyr Gly Pro Gly Gly Ser Gly Gly Ser Gly Gly Tyr Gly Gly  
                     195                      200                      205  
 Arg Ser Arg Tyr  
     210

&lt;210&gt; 5912

&lt;211&gt; 385

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5912

His Leu Glu Pro Ala Gln Leu Val Ser Lys Lys His Lys Leu Arg Ser  
     1                      5                      10                      15  
 Gln Lys Arg Pro Arg Arg Cys Leu Trp Leu His Gln Ser Ser Arg Arg  
                     20                      25                      30  
 Thr Trp Leu Gly Pro Arg Arg Gly His Pro Leu Cys Arg Cys Pro Pro  
                     35                      40                      45

## 5197

Arg	Arg	Pro	Trp	Leu	Trp	Leu	Asp	Arg	Ser	Gln	Lys	Leu	Thr	Ser	Ser	
	50					55					60					
Ala	Ser	Ser	Pro	Ser	Gln	Pro	Tyr	Ser	Val	Gln	Pro	Leu	His	Leu	Pro	
	65				70					75					80	
Asp	Gly	Trp	Ala	Asp	Pro	Ala	Gly	Leu	Arg	Leu	Arg	Gly	Val	Phe	Leu	
				85					90					95		
Cys	Leu	Pro	Arg	Val	Leu	Gln	Arg	Arg	Cys	Pro	Pro	Gly	Val	Pro	Asn	
			100					105					110			
Thr	Ser	Arg	Ala	Val	Gln	Glu	Ala	Ser	Gly	Arg	Gly	Arg	Ala	Ala	Arg	
		115					120					125				
His	Arg	Asn	Ser	Leu	Gln	Arg	Pro	Cys	Ser	Arg	Ser	Gln	Ser	Pro	Gly	
	130					135					140					
Gly	Glu	Glu	Gly	Met	Ala	Arg	Ala	Tyr	Ala	Val	Val	Cys	Asp	Cys	Lys	
	145				150					155					160	
Leu	Phe	Leu	Tyr	Asp	Leu	Pro	Glu	Gly	Lys	Ser	Thr	Gln	Pro	Gly	Val	
				165					170					175		
Ile	Ala	Ser	Gln	Val	Leu	Asp	Leu	Arg	Asp	Asp	Glu	Phe	Ser	Val	Ser	
			180					185					190			
Ser	Val	Leu	Ala	Ser	Asp	Val	Ile	His	Ala	Thr	Arg	Arg	Asp	Ile	Pro	
		195					200					205				
Cys	Ile	Phe	Arg	Val	Thr	Ala	Ser	Leu	Leu	Gly	Ala	Pro	Ser	Lys	Thr	
	210					215					220					
Ser	Ser	Leu	Leu	Ile	Leu	Thr	Glu	Asn	Glu	Asn	Glu	Lys	Arg	Lys	Trp	
	225				230					235					240	
Val	Gly	Ile	Leu	Glu	Gly	Leu	Gln	Ser	Ile	Leu	His	Lys	Asn	Arg	Leu	
				245					250					255		
Arg	Asn	Gln	Val	Val	His	Val	Pro	Leu	Glu	Ala	Tyr	Asp	Ser	Ser	Leu	
			260					265					270			
Pro	Leu	Ile	Lys	Ala	Ile	Leu	Thr	Ala	Ala	Ile	Val	Asp	Ala	Asp	Arg	
		275					280					285				
Ile	Ala	Val	Gly	Leu	Glu	Glu	Gly	Leu	Tyr	Val	Ile	Glu	Val	Thr	Arg	
	290					295					300					
Asp	Val	Ile	Val	Arg	Ala	Ala	Asp	Cys	Lys	Lys	Val	His	Gln	Ile	Glu	
	305				310					315					320	

## 5198

Leu Ala Pro Arg Glu Lys Ile Val Ile Leu Leu Cys Gly Arg Asn His  
                           325                          330                          335  
 His Val His Leu Tyr Pro Trp Ser Ser Leu Asp Gly Ala Glu Gly Ser  
                           340                          345                          350  
 Phe Asp Ile Lys Leu Pro Glu Thr Lys Gly Cys Gln Leu Met Ala Thr  
                           355                          360                          365  
 Ala Thr Leu Lys Arg Asn Ser Gly Thr Cys Leu Phe Val Ala Val Lys  
                           370                          375                          380  
 Arg  
 385

<210> 5913  
 <211> 39  
 <212> PRT  
 <213> Homo sapiens

<400> 5913  
 Thr Gln Ser Lys Trp Arg Leu Glu Val Gln Cys Gly Lys Glu Lys Gln  
   1                          5                          10                          15  
 Val Phe Ile Glu Ser Thr Asn Ser Thr Pro Phe Ile Asp Thr Glu Asn  
                           20                          25                          30  
 Val Glu Asn Pro Lys Phe Asp  
                           35

<210> 5914  
 <211> 321  
 <212> PRT  
 <213> Homo sapiens

<400> 5914  
 Glu Arg Thr Leu Gly Gln Pro Gly Phe Leu Gly Cys Pro Arg Gln Pro  
   1                          5                          10                          15  
 His Thr Ala Met His Tyr Pro Thr Ala Leu Leu Phe Leu Ile Leu Ala  
                           20                          25                          30  
 Asn Gly Ala Gln Ala Phe Arg Ile Cys Ala Phe Asn Ala Gln Arg Leu  
                           35                          40                          45  
 Thr Leu Ala Lys Val Ala Arg Glu Gln Val Met Asp Thr Leu Val Arg

## 5199

50	55	60
Ile Leu Ala Arg Cys Asp	Ile Met Val Leu Gln Glu Val Val Asp Ser	
65	70	75 80
Ser Gly Ser Ala Ile Pro Leu Leu Leu Arg Glu Leu Asn Arg Phe Asp		
	85	90 95
Gly Ser Gly Pro Tyr Ser Thr Leu Ser Ser Pro Gln Leu Gly Arg Ser		
	100	105 110
Thr Tyr Met Glu Thr Tyr Val Tyr Phe Tyr Arg Ser His Lys Thr Gln		
	115	120 125
Val Leu Ser Ser Tyr Val Tyr Asn Asp Glu Asp Asp Val Phe Ala Arg		
	130	135 140
Glu Pro Phe Val Ala Gln Phe Ser Leu Pro Ser Asn Val Leu Pro Ser		
	145	150 155 160
Leu Val Leu Val Pro Leu His Thr Thr Pro Lys Ala Val Glu Lys Glu		
	165	170 175
Leu Asn Ala Leu Tyr Asp Val Phe Leu Glu Val Ser Gln His Trp Gln		
	180	185 190
Ser Lys Asp Val Ile Leu Leu Gly Asp Phe Asn Ala Asp Cys Ala Ser		
	195	200 205
Leu Thr Lys Lys Arg Leu Asp Lys Leu Glu Leu Arg Thr Glu Pro Gly		
	210	215 220
Phe His Trp Val Ile Ala Asp Gly Glu Asp Thr Thr Val Arg Ala Ser		
	225	230 235 240
Thr His Cys Thr Tyr Asp Arg Val Val Leu His Gly Glu Arg Cys Arg		
	245	250 255
Ser Leu Leu His Thr Ala Ala Ala Phe Asp Phe Pro Thr Ser Phe Gln		
	260	265 270
Leu Thr Glu Glu Glu Ala Leu Asn Ile Ser Asp His Tyr Pro Val Glu		
	275	280 285
Val Glu Leu Lys Leu Ser Gln Ala His Ser Val Gln Pro Leu Ser Leu		
	290	295 300
Thr Val Leu Leu Leu Leu Ser Leu Leu Ser Pro Gln Leu Cys Pro Ala		
	305	310 315 320
Ala		

## 5200

&lt;210&gt; 5915

&lt;211&gt; 38

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5915

Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Glu Asn Arg Pro Val Pro  
1 5 10 15  
Pro His Arg Ser Ser Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro  
20 25 30  
Cys Trp Pro Gly Trp Ser  
35

&lt;210&gt; 5916

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5916

Ile Asn Leu Glu Glu Val Gly Thr Ile Cys Leu Gly Phe Phe Lys Ser  
1 5 10 15  
Ser Thr Asn Leu Ser Glu Phe Val Met Arg Lys Ile Gly Asp Leu Ala  
20 25 30  
Cys Ala Asn Ile Gln His Leu Ser Ser Arg Ser Leu Val Asn Ile Val  
35 40 45  
Lys Met Phe Arg Phe Thr His Val Asp His Ile Asn Phe Met Lys Gln  
50 55 60  
Ile Gly Glu Ile Ala Pro Gln Arg Ile Pro Ser Leu Gly Val Gln Gly  
65 70 75 80  
Val Met His Leu Thr Leu Tyr Cys Ser Ala Leu Arg Phe Leu Asn Glu  
85 90 95  
Gly Val Met Asn Ala Val Ala Ala Ser Leu Pro Pro Arg Val Ala His  
100 105 110  
Cys Arg Ser Lys Asp Val Ala Lys Ile Leu Trp Ser Phe Gly Thr Leu  
115 120 125

## 5201

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Asn Tyr Lys Pro Pro Asn Ala Glu Glu Phe Tyr Ser Ser Leu Ile Ser
 130                      135                      140

Glu Ile His Arg Lys Met Pro Glu Phe Asn Gln Tyr Pro Glu His Leu
145                      150                      155                      160

Pro Thr Cys Leu Leu Gly Leu Ala Phe Leu Glu Tyr Phe Pro Val Glu
                      165                      170                      175

Leu Ile Asp Phe Ala Leu Ser Pro Gly Phe Val Arg Leu Ala Gln Glu
                      180                      185                      190

Arg Thr Lys Phe Asp Leu Leu Lys Glu Leu Tyr Thr Leu Asp Gly Thr
                      195                      200                      205

Val Gly Ile Glu Cys Pro Asp Tyr Arg Gly Asn Arg Leu Ser Thr His
                      210                      215                      220

Leu Gln Gln Glu Gly Ser Glu Leu Leu Trp Tyr Leu Ala Glu Lys Asp
225                      230                      235                      240

Met Asn Ser Lys Pro Glu Phe Leu Glu Thr Val Phe Leu Leu Glu Thr
                      245                      250                      255

Met Leu Gly Gly Pro Gln Tyr Val Lys His His Met Ile Leu Pro His
                      260                      265                      270

Thr Arg Ser Ser Asp Leu Glu Val Gln Leu Asp Val Asn Leu Lys Pro
                      275                      280                      285

Leu Pro Phe Asn Arg Glu Ala Thr Pro Ala Glu Asn Val Ala Lys Leu
                      290                      295                      300

Arg Leu Glu His Val Gly Val Ser Leu Thr Asp Asp Leu Met Asn Lys
305                      310                      315                      320

Leu Leu Lys Gly Lys Ala Arg Gly His Phe Gln Gly Lys Thr Glu Ser
                      325                      330                      335

Glu Pro Gly Gln Gln Pro Trp Ser Trp Arg Ile Arg Gln Leu Tyr Leu
                      340                      345                      350

Trp Gly Ala Ser Phe Ala Met
                      355

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&lt;210&gt; 5917

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

## 5202

&lt;400&gt; 5917

Phe Gly Leu Phe Cys Thr Leu Tyr Lys Trp Thr His Ile Met Phe Ile  
 1 5 10 15

Phe Trp Val Cys Leu Leu Ser Phe Asn Ile Arg Phe Val Gly Ser Ser  
 20 25 30

Leu Leu Cys Val Val Leu Ser Cys Ser Leu Tyr Ser Val Pro Lys Tyr  
 35 40 45

Ser Ile Leu Gln Phe Thr His Ser Thr Leu Asp Ser Lys Cys Phe His  
 50 55 60

Ile Trp Ala Ile Thr Asn Ser Ala Ala Val Asn Ile His Ile His Ile  
 65 70 75 80

Phe Trp

&lt;210&gt; 5918

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5918

Ala Phe Leu Pro Ala Gly Pro Ser Gly Phe Pro Ser Gly Pro Gly Cys  
 1 5 10 15

Val Trp Lys Cys His Leu Gly Ala Arg Ala Trp Met Ser Ala Ser Gly  
 20 25 30

Leu Cys Leu Ala Pro Tyr Pro Thr Val Ala Glu Leu Val Tyr Lys Leu  
 35 40 45

Gln Asp Ser Leu Leu Tyr Ser Ser Ser Ser Ser Pro Val Ala Glu Arg  
 50 55 60

Arg Asn Leu Ser Gln Ser Cys Glu Leu Tyr Cys Leu Gly Leu Gly Glu  
 65 70 75 80

Gly Trp His Lys His Ser Leu Ser His Pro Gly Trp Cys Leu Thr Asn  
 85 90 95

Leu Cys Ala Pro Gln Val His Trp Leu Gln Gly Gln Arg Ser Thr  
 100 105 110



## 5203

&lt;210&gt; 5919

&lt;211&gt; 441

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5919

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Arg Arg Arg Arg Ala Cys Arg Ser Ala Glu Gly Thr Gly Leu Arg Ser
 1              5              10              15

Leu Leu Leu Pro Pro Arg Leu Gln Leu Pro Ala Gly Pro Phe Ser Arg
      20              25              30

Cys Arg Trp Asp Pro Val Ser Ser Pro Arg Pro Ser Thr Met Pro Pro
      35              40              45

Lys Lys Gly Gly Asp Gly Ile Lys Pro Pro Pro Ile Ile Gly Arg Phe
 50              55              60

Gly Thr Ser Leu Lys Ile Gly Ile Val Gly Leu Pro Asn Val Gly Lys
 65              70              75              80

Ser Thr Phe Phe Asn Val Leu Thr Asn Ser Gln Ala Ser Ala Glu Asn
      85              90              95

Phe Pro Phe Cys Thr Ile Asp Pro Asn Glu Ser Arg Val Pro Val Pro
      100              105              110

Asp Glu Arg Phe Asp Phe Leu Cys Gln Tyr His Lys Pro Ala Ser Lys
      115              120              125

Ile Pro Ala Phe Leu Asn Val Val Asp Ile Ala Gly Leu Val Lys Gly
      130              135              140

Ala His Asn Gly Gln Gly Leu Gly Asn Ala Phe Leu Ser His Ile Ser
      145              150              155              160

Ala Cys Asp Gly Ile Phe His Leu Thr Arg Ala Phe Glu Asp Asp Asp
      165              170              175

Ile Thr His Val Glu Gly Ser Val Asp Pro Ile Arg Asp Ile Glu Ile
      180              185              190

Ile His Glu Glu Leu Gln Leu Lys Asp Glu Glu Met Ile Gly Pro Ile
      195              200              205

Ile Asp Lys Leu Glu Lys Val Ala Val Arg Gly Gly Asp Lys Lys Leu
      210              215              220

Lys Pro Glu Tyr Asp Ile Met Cys Lys Val Lys Ser Trp Val Ile Asp
      225              230              235              240

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Gln Lys Lys Pro Val Arg Phe Tyr His Asp Trp Asn Asp Lys Glu Ile  
245 250 255

Glu Val Leu Asn Lys His Leu Phe Leu Thr Ser Lys Pro Met Val Tyr  
260 265 270

Leu Val Asn Leu Ser Glu Lys Asp Tyr Ile Arg Lys Lys Asn Lys Trp  
275 280 285

Leu Ile Lys Ile Lys Glu Trp Val Asp Lys Tyr Asp Pro Gly Ala Leu  
290 295 300

Val	Ile	Pro	Phe	Ser	Gly	Ala	Leu	Glu	Leu	Lys	Leu	Gln	Glu	Leu	Ser
305					310					315					320

Ala Glu Glu Arg Gln Lys Tyr Leu Glu Ala Asn Met Thr Gln Ser Ala  
325 330 335

Leu Pro Lys Ile Ile Lys Ala Gly Phe Ala Ala Leu Gln Leu Glu Tyr  
340 345 350

Phe Phe Thr Ala Gly Pro Asp Glu Val Arg Ala Trp Thr Ile Arg Lys  
355 360 365

Gly Thr Lys Ala Pro Gln Ala Ala Gly Lys Ile His Thr Asp Phe Glu  
370 375 380

Lys Gly Phe Ile Met Ala Glu Val Met Lys Tyr Glu Asp Phe Lys Glu  
385 390 395 400

Glu Gly Ser Glu Asn Ala Val Lys Ala Ala Gly Lys Tyr Arg Gln Gln  
405 410 415

Gly Arg Asn Tyr Ile Val Glu Asp Gly Asp Ile Ile Phe Phe Lys Phe  
420 425 430

Asn Thr Pro Gln Gln Pro Lys Lys Lys  
435 440

<210> 5920

<211> 275

<212> PRT

<213> Homo sapiens

<400> 5920

Gly Val Ala Leu Phe Lys Ser Ala Ala Gly Asp Gln Pro Thr Ala Ala  
1 5 10 15

Cys Ile Cys Ile Gln Arg Gln Val Pro Pro Val Pro Ala Ala Arg Ala

## 5205

20	25	30
Pro Gln Ser Arg Thr Arg Ser Ala Gln Ala Lys Leu Ala Leu Thr Met		
35	40	45
Pro Val Lys Gly Gly Thr Lys Cys Ile Lys Tyr Leu Leu Phe Gly Phe		
50	55	60
Asn Phe Ile Phe Trp Leu Ala Gly Ile Ala Val Leu Ala Ile Gly Leu		
65	70	75
Trp Leu Arg Phe Asp Ser Gln Thr Lys Ser Ile Phe Glu Gln Glu Thr		
	85	90
Asn Asn Asn Asn Ser Ser Phe Tyr Thr Gly Val Tyr Ile Leu Ile Gly		
	100	105
Ala Gly Ala Leu Met Met Leu Val Gly Phe Leu Gly Cys Cys Gly Ala		
	115	120
Val Gln Glu Ser Gln Cys Met Leu Gly Leu Phe Phe Gly Phe Leu Leu		
	130	135
Val Ile Phe Ala Ile Glu Ile Ala Ala Ala Ile Trp Gly Tyr Ser His		
145	150	155
Lys Asp Glu Val Ile Lys Glu Val Gln Glu Phe Tyr Lys Asp Thr Tyr		
	165	170
Asn Lys Leu Lys Thr Lys Asp Glu Pro Gln Arg Glu Thr Leu Lys Ala		
	180	185
Ile His Tyr Ala Leu Asn Cys Cys Gly Leu Ala Gly Gly Val Glu Gln		
	195	200
Phe Ile Ser Asp Ile Cys Pro Lys Lys Asp Val Leu Glu Thr Phe Thr		
	210	215
Val Lys Ser Cys Pro Asp Ala Ile Lys Glu Val Phe Asp Asn Lys Phe		
225	230	235
His Ile Ile Gly Ala Val Gly Ile Gly Ile Ala Val Val Met Ile Phe		
	245	250
Gly Met Ile Phe Ser Met Ile Leu Cys Cys Ala Ile Arg Arg Asn Arg		
	260	265
Glu Met Val		
275		

## 5206

&lt;210&gt; 5921

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5921

Val Gly Cys Arg Pro Leu Ser Ser Cys His Leu Leu Ala Val Ala Arg  
1 5 10 15

Ser Tyr Phe Ser Leu Ser Gly Val Ile Cys Ile Trp Arg Phe His Cys  
20 25 30

Cys Phe Ser Leu Ser Tyr Leu Glu Trp Asn Pro Glu Ser Cys Pro Phe  
35 40 45

Pro Pro Thr Cys Ser Tyr Leu Lys Ala Pro Glu Thr Tyr Trp Val Pro  
50 55 60

Asp Ser Cys Phe Val Cys Ile Arg Arg Val Val Ala Cys His Leu Ala  
65 70 75 80

Cys Phe Leu Asn Asn Pro Thr Ser Cys Pro Pro Cys Thr Tyr Ile Ala  
85 90 95

Thr Ala Leu Ile Trp Ala Phe Phe Phe Leu Gly Gln Cys Leu Cys Pro  
100 105 110

Asn Ser Glu  
115

&lt;210&gt; 5922

&lt;211&gt; 291

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (217)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5922

His Gly Leu Cys Arg Leu Phe Asn Ser Pro Leu Lys Pro Leu Ala Asp  
1 5 10 15

## 5207

Leu Asp Pro Val Val Val Thr Phe Trp Tyr Arg Ala Pro Glu Leu Leu  
                   20                  25                  30

Leu Gly Ala Arg His Tyr Thr Lys Ala Ile Asp Ile Trp Ala Ile Gly  
                   35                  40                  45

Cys Ile Phe Ala Glu Leu Leu Thr Ser Glu Pro Xaa Phe His Cys Arg  
                   50                  55                  60

Gln Glu Asp Ile Lys Thr Ser Asn Pro Tyr His His Asp Gln Leu Asp  
                   65                  70                  75                  80

Arg Ile Phe Asn Val Met Gly Phe Pro Ala Asp Lys Asp Trp Glu Asp  
                   85                  90                  95

Ile Lys Lys Met Pro Glu His Ser Thr Leu Met Lys Asp Phe Arg Arg  
                   100                  105                  110

Asn Thr Tyr Thr Asn Cys Ser Leu Ile Lys Tyr Met Glu Lys His Lys  
                   115                  120                  125

Val Lys Pro Asp Ser Lys Ala Phe His Leu Leu Gln Lys Leu Leu Thr  
                   130                  135                  140

Met Asp Pro Ile Lys Arg Ile Thr Ser Glu Gln Ala Met Gln Asp Pro  
                   145                  150                  155                  160

Tyr Phe Leu Glu Asp Pro Leu Pro Thr Ser Asp Val Phe Ala Gly Cys  
                   165                  170                  175

Gln Ile Pro Tyr Pro Lys Arg Glu Phe Leu Thr Glu Glu Glu Pro Asp  
                   180                  185                  190

Asp Lys Gly Asp Lys Lys Asn Gln Gln Gln Gln Gly Asn Asn His  
                   195                  200                  205

Thr Asn Gly Thr Gly His Pro Gly Xaa Gln Asp Ser Ser His Thr Gln  
                   210                  215                  220

Gly Pro Pro Leu Lys Lys Val Arg Val Val Pro Pro Thr Thr Thr Ser  
                   225                  230                  235                  240

Gly Gly Leu Ile Met Thr Ser Asp Tyr Gln Arg Ser Asn Pro His Ala  
                   245                  250                  255

Ala Tyr Pro Asn Pro Gly Pro Ser Thr Ser Gln Pro Gln Ser Ser Met  
                   260                  265                  270

Gly Tyr Ser Ala Thr Ser Gln Gln Pro Pro Gln Tyr Ser His Gln Thr  
                   275                  280                  285

5208

His Arg Tyr  
290

&lt;210&gt; 5923

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5923

Arg Pro Pro Ser Arg Trp Ser Trp Trp Gln Gly Lys Pro Thr Gly Gly  
1 5 10 15

Val Cys Val Ala Ala Ala Arg Ser Ser Pro Ser Val Thr Ala Pro Thr  
20 25 30

Ser Ser Asn Ala Leu Ala Tyr Leu His Ser Ser Ser Arg Pro Lys Arg  
35 40 45

Pro Ala Trp Trp His Ser Val Pro Ala Arg Pro Leu Arg Gly Pro Arg  
50 55 60

Thr Ala Met Ala Pro Thr Gly Val Ser Ala Cys Arg Arg Gln Lys Trp  
65 70 75 80

Ala Pro His Ser Glu Gly Ala Ala Ala Val Gln Pro Gln Val Ala Leu  
85 90 95

Ala Pro Gly Leu  
100

&lt;210&gt; 5924

&lt;211&gt; 241

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (17)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

## 5209

&lt;221&gt; SITE

&lt;222&gt; (19)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5924

Tyr	Arg	Pro	Gly	Pro	Leu	Thr	Ser	Gln	Gly	Met	Asn	Xaa	Ser	Arg	Gln	1	5	10	15
Xaa	Pro	Xaa	Leu	Asn	Leu	Leu	Pro	Ser	Ser	Ala	His	Phe	Arg	Pro	Ser	20	25	30	
Thr	Tyr	Lys	Lys	Ser	Ser	Gly	Pro	Leu	Lys	Ala	Xaa	Lys	Leu	Ile	Ile	35	40	45	
His	Trp	Asn	Cys	Trp	Glu	Asp	Ser	Leu	Ser	Gly	Ile	Ala	Met	Asn	Val	50	55	60	
Pro	Ala	Ser	Arg	Gly	Ser	Asn	Leu	Asn	Ser	Ser	Gly	Ala	Asn	Arg	Thr	65	70	75	80
Ser	Leu	Ser	Gly	Gly	Thr	Gly	Ser	Gly	Thr	Gln	Gly	Ala	Thr	Lys	Pro	85	90	95	
Leu	Ser	Thr	Pro	His	Arg	Pro	Ser	Thr	Ala	Ser	Gly	Ser	Ser	Val	Val	100	105	110	
Thr	Ala	Ser	Val	Gln	Lys	Leu	Ile	His	Thr	Glu	Asp	Pro	Phe	Asn	Asp	115	120	125	
Glu	His	Gln	Glu	Arg	Gln	Glu	Val	Glu	Met	Leu	Ala	Lys	Lys	Phe	Glu	130	135	140	
Met	Lys	Tyr	Tyr	Asp	Glu	Leu	Val	Pro	Ala	Ser	Leu	Thr	Thr	Lys	Tyr	145	150	155	160
Gly	Gly	Phe	Tyr	Ile	Asn	Thr	Gly	Thr	Leu	Gln	Phe	Arg	Gln	Ala	Ser	165	170	175	
Asp	Thr	Glu	Glu	Asp	Asp	Ile	Thr	Asp	Asn	Gln	Lys	His	Lys	Pro	Pro	180	185	190	
Lys	Val	Pro	Lys	Ile	Lys	Glu	Asp	Asp	Ile	Glu	Met	Lys	Lys	Arg	Lys	195	200	205	
Arg	Lys	Glu	Glu	Gly	Glu	Lys	Glu	Lys	Lys	Pro	Arg	Lys	Lys	Val	Pro	210	215	220	

## 5210

Lys Gln Leu Gly Val Val Ala Leu Asn Ser His Lys Ser Glu Lys Lys  
 225 230 235 240

Lys

<210> 5925

<211> 330

<212> PRT

<213> Homo sapiens

<400> 5925

Ala Gly Ser Arg Cys Pro Ala Trp Arg Ala Arg Ser Ala Cys Arg Trp  
 1 5 10 15

Pro Leu Ala Arg Cys Ser Ser Pro Gly Cys Asp Ser Gly Phe Gly Lys  
 20 25 30

Glu Thr Ala Lys Lys Leu Asp Ser Met Gly Phe Thr Val Leu Ala Thr  
 35 40 45

Val Leu Glu Leu Asn Ser Pro Gly Ala Ile Glu Leu Arg Thr Cys Cys  
 50 55 60

Ser Pro Arg Leu Arg Leu Leu Gln Met Asp Leu Thr Lys Pro Gly Asp  
 65 70 75 80

Ile Ser Arg Val Leu Glu Phe Thr Lys Ala His Thr Thr Ser Thr Gly  
 85 90 95

Leu Trp Gly Leu Val Asn Asn Ala Gly His Asn Glu Val Val Ala Asp  
 100 105 110

Ala Glu Leu Ser Pro Val Ala Thr Phe Arg Ser Cys Met Glu Val Asn  
 115 120 125

Phe Phe Gly Ala Leu Glu Leu Thr Lys Gly Leu Leu Pro Leu Leu Arg  
 130 135 140

Ser Ser Arg Gly Arg Ile Val Thr Val Gly Ser Pro Ala Gly Asp Met  
 145 150 155 160

Pro Tyr Pro Cys Leu Gly Ala Tyr Gly Thr Ser Lys Ala Ala Val Ala  
 165 170 175

Leu Leu Met Asp Thr Phe Ser Cys Glu Leu Leu Pro Trp Gly Val Lys  
 180 185 190



## 5211

Val Ser Ile Ile Gln Pro Gly Cys Phe Lys Thr Glu Ser Val Arg Asn  
 195 200 205

Val Gly Gln Trp Glu Lys Arg Lys Gln Leu Leu Leu Ala Asn Leu Pro  
 210 215 220

Gln Glu Leu Leu Gln Ala Tyr Gly Lys Asp Tyr Ile Glu His Leu His  
 225 230 235 240

Gly Gln Phe Leu His Ser Leu Arg Leu Ala Met Ser Asp Leu Thr Pro  
 245 250 255

Val Val Asp Ala Ile Thr Asp Ala Leu Leu Ala Ala Arg Pro Arg Arg  
 260 265 270

Arg Tyr Tyr Pro Gly Gln Gly Leu Gly Leu Met Tyr Phe Ile His Tyr  
 275 280 285

Tyr Leu Pro Glu Gly Leu Arg Ala Ala Ser Cys Arg Pro Ser Ser Ser  
 290 295 300

Val Thr Val Cys Leu Glu His Cys Ser Leu Ala Ser Leu Ala Leu Pro  
 305 310 315 320

His His Arg Thr Gln Pro Arg Thr Gln Thr  
 325 330

<210> 5926

<211> 88

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (82)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5926

Cys Xaa His Met Val Ile Met Cys Asp Trp Ile Met Lys Ile Ile Val

## 5212

1	5	10	15
Val Cys Val Gly Thr Arg Asp Cys Pro Val Ser Arg Thr Pro Ala His	20	25	30
Tyr Leu Ser Ile Leu Gln Pro Phe Ile Trp Lys Leu Pro Thr Ser Leu	35	40	45
Cys Cys Val Cys Leu His Met Xaa Gly Phe Ala Val Leu Ala Leu Thr	50	55	60
Ala His Arg Glu Cys Arg Pro His Pro Asn Pro His Gln Leu Pro Leu	65	70	75
Glu Xaa Gln Asn Leu Gly Trp Gly	85		

<210> 5927  
 <211> 40  
 <212> PRT  
 <213> Homo sapiens

<400> 5927
Arg Tyr His Ile Leu Ser Gly Ile Ser Pro Pro Ala Leu Trp Leu Leu
1 5 10 15
Val Glu Arg Leu Phe Gly Tyr Gly Leu Ala Val Glu Lys Ile Gln Val
20 25 30
Ile Leu Leu Asn Asp Phe Thr Phe
35 40

<210> 5928  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (96)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5928
Thr Phe Pro Asn Gly Ala Phe Ala Leu Ile Ser Lys Leu Thr Ala Arg
1 5 10 15
Asp Ala Phe Leu Tyr Phe Asp Cys Phe Thr Val Glu Gly Gln Ile Pro

## 5213

20	25	30
Arg Leu Ser Lys Val Asn Leu Phe Thr Leu Leu Ser Leu Trp Met Glu		
35	40	45
Leu Phe Pro Ala Glu Ala Gln Arg Gln Lys Ser Gln Lys Asn Glu Glu		
50	55	60
Gly Lys His Gly Pro Leu Gly Asp Asn Glu Glu Arg Thr Arg Val Ser		
65	70	75
Thr Asp Lys Arg Gln Lys Thr Met Phe Cys Leu Phe Glu Asn Asp Xaa		
85	90	95
Lys Cys Lys Ala Leu Thr Val Met Ile Arg Ser Met Ser Arg Ser Val		
100	105	110

Pro

<210> 5929  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

<400> 5929  
 Cys Ile Gly Pro Lys Cys Lys Leu His Trp Ser Asp Leu Glu Ala Phe  
 1 5 10 15  
 Met Leu Thr Ser Phe Gly Lys Val Lys Asn Asn Lys Ile Ile Leu Asp  
 20 25 30  
 Phe Ile Leu Tyr Ile Lys Ile Tyr Leu Leu Arg Lys Gln Ser Val Tyr  
 35 40 45  
 Tyr Leu Leu Val  
 50

<210> 5930  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<400> 5930  
 Ala Glu Gln Glu Glu His Gly Lys Arg Lys Lys Lys Gly Lys Gly Leu  
 1 5 10 15

## 5214

Gly Lys Lys Arg Asp Pro Cys Leu Arg Lys Tyr Lys Asp Phe Cys Ile  
                   20                  25                  30  
 His Gly Glu Cys Lys Tyr Val Lys Glu Leu Arg Ala Pro Ser Cys Ile  
                   35                  40                  45  
 Cys His Pro Gly Tyr His Gly Glu Arg Cys His Gly Leu Ser Leu Pro  
                   50                  55                  60  
 Val Glu Asn Arg Leu Tyr Thr Tyr Asp His Thr Thr Ile Leu Ala Val  
                   65                  70                  75                  80  
 Val Ala Val Val Leu Asp Leu Met Ser  
                                   85

&lt;210&gt; 5931

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (66)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5931

Glu Ser Pro Thr Ile Val Lys Ala Gly Thr Pro Ala Gly Thr Gly Pro  
           1                  5                  10                  15  
 Glu Phe Pro Gly Arg Pro Thr Arg Pro Pro Thr Arg Pro Gly Leu Leu  
                   20                  25                  30  
 Glu Pro Trp Thr Ser Lys Gly Val Glu Ile Ala Ala Ala Pro His Tyr  
                   35                  40                  45  
 Lys His Leu Gly Leu Glu Ala Thr Glu Tyr His Phe Leu His Ile Leu  
                   50                  55                  60  
 Leu Xaa Lys Ala Gly Gly Glu Pro Ala Leu Thr Lys Arg Val Gly Asp  
                   65                  70                  75                  80  
 Gln Thr Phe Thr Ser  
                                   85

&lt;210&gt; 5932

&lt;211&gt; 155

&lt;212&gt; PRT

## 5215

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5932

Glu	Trp	Thr	Glu	Gly	Gln	Thr	Val	Gln	Gly	Arg	Glu	Asp	His	Trp	Gly
1				5					10					15	

Arg	Glu	Val	Thr	Xaa	Arg	Glu	Val	Ser	Val	Gly	Arg	Gly	Glu	Thr	Lys
			20					25					30		

Glu	Lys	Ile	Glu	Glu	Gln	Lys	Ala	Leu	Ala	Leu	Gln	Leu	Gln	Asn	Gln
	35						40					45			

Arg	Leu	Gln	Glu	Arg	Glu	His	Ser	Val	His	Asp	Ser	Val	Glu	Leu	His
	50					55					60				

Leu	Arg	Val	Pro	Leu	Glu	Lys	Glu	Ile	Pro	Val	Thr	Val	Val	Gln	Glu
65					70					75					80

Thr	Gln	Lys	Lys	Gly	His	Lys	Leu	Thr	Asp	Ser	Glu	Asp	Glu	Phe	Pro
				85					90					95	

Glu	Ile	Thr	Glu	Glu	Met	Glu	Lys	Glu	Ile	Lys	Asn	Val	Phe	Arg	Asn
			100					105					110		

Gly	Asn	Gln	Asp	Glu	Val	Leu	Ser	Glu	Ala	Phe	Arg	Leu	Thr	Ile	Thr
	115						120					125			

Arg	Lys	Asp	Ile	Gln	Thr	Leu	Asn	His	Leu	Asn	Trp	Leu	Asn	Asp	Glu
	130					135					140				

Ile	Ile	Asn	Phe	Tyr	Met	Asn	Met	Leu	Met	Gly
145					150					155

&lt;210&gt; 5933

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5933

Gly	Thr	Thr	Thr	Arg	Asp	Phe	Thr	Gln	Leu	Asn	Glu	Leu	Gln	Cys	Arg
1				5					10					15	

Phe	Pro	Arg	Arg	Leu	Val	Val	Leu	Gly	Phe	Pro	Cys	Asn	Gln	Phe	Gly
			20					25					30		

5216

His Gln Glu Asn Cys Gln Asn Glu Glu Ile Leu Asn Ser Leu Lys Tyr  
 35 40 45

Val Arg Pro Gly Gly Gly Tyr Gln Pro Thr Phe Thr Leu Val Gln Lys  
 50 55 60

Cys Glu Val Asn Gly Gln Asn Glu His Pro Val Phe Ala Tyr Leu Lys  
 65 70 75 80

Asp Lys Leu Pro Tyr Pro Tyr Asp Asp Pro Phe Ser Leu Met Thr Asp  
 85 90 95

Pro Lys Leu Ile Ile Trp Ser Pro Val Arg Arg Ser Asp Val Ala Trp  
 100 105 110

Asn Phe Glu Lys Phe Leu Ile Gly Pro Glu Gly Glu Pro Phe Arg Arg  
 115 120 125

Tyr Ser Arg Thr Phe Pro Thr Ile Asn Ile Glu Pro Asp Ile Lys Arg  
 130 135 140

Leu Leu Lys Val Ala Ile  
 145 150

&lt;210&gt; 5934

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5934

His Ile Arg Thr Gly Glu Arg Glu Arg Arg Gly Leu Phe Phe Cys Ser  
 1 5 10 15

Ile Phe Gln Ser His Ile Arg Val Ile Leu Asn Cys Asn Lys Asp Gln  
 20 25 30

Leu Leu Lys Ile Ser Leu Leu Lys Ile Gln Asn Asp Leu Ser Ile Leu  
 35 40 45

Lys Ile Ile Tyr Leu Pro Cys Ser Cys Leu Leu Thr Leu Ala Ile Ser  
 50 55 60

Trp Arg Gly  
 65

&lt;210&gt; 5935

## 5217

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5935

Ile	Leu	Gly	Asp	Thr	Ile	Glu	Gly	Thr	Pro	Ala	Gly	Thr	Gly	Pro	Glu
1				5					10					15	

Phe	Pro	Gly	Arg	Pro	Thr	Arg	Pro	Xaa	Thr	Val	Arg	Leu	Ser	Ala	Ile
			20					25					30		

Asp	Gly	Ala	Leu	Leu	Trp	Cys	Leu	Leu	Glu	Val	Tyr	Cys	His	Tyr	Arg
		35					40					45			

Glu	Pro	Cys	Leu	Leu	Ala	Ser	Leu	Asp	Leu	Tyr	Ser	Lys	Gln	Ser	Val
	50					55					60				

Ser	Asp	Asp	Lys	Phe	Cys	Arg	Arg	Val	Tyr	Ser	Glu	Pro	Leu	Thr	Ser
65					70					75					80

Cys	Lys	Gly	Lys	Met	Gly	Gly	Leu	Pro	Glu	Ile	Pro	Leu	Lys	Gln	Gly
				85					90					95	

Gly	Leu	Trp	Gly	Gly	Arg	Leu	Gly	Tyr	Leu	Ser
			100					105		

&lt;210&gt; 5936

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5936

Arg	Ala	Leu	Trp	Phe	Phe	Ser	Ser	Arg	Gly	His	Asp	Ala	Ser	Gln	Ile
1				5					10					15	

Thr	Leu	Ala	Leu	Xaa	Thr	Ala	Ala	Ser	Tyr	Pro	Arg	Ala	Cys	Gln	Ala
				20				25					30		

Leu	Gly	Ala	Met	Leu	Ser	Lys	Gly	Ala	Leu	Asn	Pro	Ala	Asp	Ile	Thr
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5218

35	40	45
Val Leu Phe Lys Met Phe Thr Ser Met Asp Pro Pro Pro Val Glu Leu		
50	55	60
Glu Val Ala Ser Gln Glu Ser Pro Met Ser Ala Gly Lys Val Thr Leu		
65	70	75 80
Glu Ser Leu Cys Leu Ser Asp Cys Leu Lys Ala Val Asn Ala Asn Pro		
85	90	95
Ser Leu Ser Trp Ser Phe Leu Ser His Thr Leu Cys Leu Glu Pro Val		
100	105	110
Gly Pro Leu Leu Cys Arg Asp Thr Leu Arg Gly Gly Gly		
115	120	125

&lt;210&gt; 5937

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5937

Arg His Cys Leu Pro Pro Thr Pro Pro Gln Gly Cys Gly Leu Pro Ala		
1	5	10 15
Leu Gly Gly Gln Ala Met Leu Thr Leu His Gly Gly His Ser Ser Arg		
20	25	30
Glu Ala Xaa Lys Val Val Asn Ser Ile Leu Ala Phe Arg Glu Lys Glu		
35	40	45
Trp Gln Arg Leu Gln Ser Asn Pro His Leu Lys Glu Gly Ser Val Thr		
50	55	60
Ser Val Asn Leu Thr Lys Leu Glu Gly Gly Val Ala Tyr Asn Val Ile		
65	70	75 80
Pro Ala Thr Met Ser Ala Ser Phe Asp Phe Arg Val Ala Pro Asp Val		
85	90	95
Asp Phe Lys Ala Phe Glu Glu Gln Leu Gln Ser Trp Cys Gln Ala Ala		
100	105	110



## 5219

Gly Glu Gly Val Thr Leu Glu Phe Ala Gln Lys Trp Met His Pro Gln  
 115 120 125

Val Thr Pro Thr Asp Asp Ser Asn Pro Trp Trp Ala Ala Phe Ser Arg  
 130 135 140

Val Cys Lys Asp Met Asn Leu Thr Leu Glu Pro Glu Ile Met Pro Ala  
 145 150 155 160

Ala Thr Asp Asn Arg Tyr Ile Arg Ala Val Gly Val Pro Ala Leu Gly  
 165 170 175

Phe Ser Pro Met Asn Arg Thr Pro Val Leu Leu His Asp His Asp Glu  
 180 185 190

Arg Leu His Glu Ala Val Phe Leu Arg Gly Val Asp Ile Tyr Thr Arg  
 195 200 205

Leu Leu Pro Ala Leu Ala Ser Val Pro Ala Leu Pro Ser Asp Ser  
 210 215 220

<210> 5938

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5938

Ala Leu Cys Pro Pro Arg Gly Thr Ala Ser Gly Pro Arg His Thr Leu  
 1 5 10 15

Trp Leu Asn Gln Gly Leu Gln Gly Pro Cys Gly Pro Ala Gln Ala Leu  
 20 25 30

Met Gly Arg His Val Arg Ser Trp Arg Thr Gln Ala Pro Phe Leu Ser  
 35 40 45

Gly Val Val Phe Phe Leu Cys Pro Gly Ala Ser Pro Ser Ser Asn Gly  
 50 55 60

Pro Phe Ala Arg Phe Gly Val Pro Leu Ala Gly Pro Ile Arg Thr Leu  
 65 70 75 80

Arg Ser Asn Gln Gly Arg  
 85

<210> 5939

<211> 130

## 5220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5939

Arg Arg Asp Ala Cys Pro Ile Ser Arg Glu Pro Pro Thr Arg Pro Trp  
 1 5 10 15

Gly Thr Thr Ser Thr Leu Leu Leu Ser Leu Gln Ser Pro Val Pro Arg  
 20 25 30

Met Gly His Leu Gln Pro Leu Ala Leu Pro Gln Phe Leu His Leu Pro  
 35 40 45

Ala Ala Ala Pro Arg Asn Trp Ala Pro Ser Ser Arg Ala Trp Pro Ala  
 50 55 60

Cys Ala Pro Arg Ser Arg Pro Gly Arg Ala Ala Val Phe Leu Lys Tyr  
 65 70 75 80

Ala Arg Pro Gln Arg Gln Gly Thr Ser Leu Ala Ala Ala Leu Pro Ala  
 85 90 95

Ala Ala Ser Ser Leu Ser Leu Pro Glu Tyr Trp Asp Ser Val Thr Lys  
 100 105 110

Lys Ser Thr Thr Lys Asn Lys Thr Leu Pro Val Cys Val Arg Leu Ser  
 115 120 125

Ser Gln  
 130

&lt;210&gt; 5940

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5940

Gly Arg Thr Cys Lys Lys Glu Leu Thr Arg Lys Asp Thr Ile Met Ala  
 1 5 10 15

His Val Thr Glu Phe His Asn Gly His Arg Tyr Phe Tyr Glu Met Asp  
 20 25 30

Glu Val Glu Gly Glu Thr Leu Pro Ser Ser Ser Thr Thr Leu Asp Asn  
 35 40 45

Leu Thr Ala Asn Lys Pro Ser Ser Ala Ile Thr Val Ile Asp His Ser  
 50 55 60

## 5221

Pro Ala Asn Ser Ser Pro Arg Gly Lys Trp Gln Cys Arg Ile Cys Glu  
 65 70 75 80  
 Asp Met Phe Asp Ser Gln Glu Tyr Val Lys Gln His Cys Met Ser Leu  
 85 90 95  
 Ala Ser His Lys Phe His Arg Tyr Ser Cys Ala His Cys Arg Lys Pro  
 100 105 110  
 Phe His Lys Ile Glu Thr Leu Tyr Arg His Cys Gln Asp Glu His Asp  
 115 120 125  
 Asn Glu Ile Lys Ile Lys Tyr Phe Cys Gly Leu Cys Asp Leu Ile Phe  
 130 135 140  
 Asn Val Glu Glu  
 145

&lt;210&gt; 5941

&lt;211&gt; 268

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5941

Pro Gly Arg Pro Thr Arg Pro Arg Thr Arg Gly Ile Asn Lys Leu Ile  
 1 5 10 15  
 Arg Ile Gly Arg Asn Glu Cys Val Val Val Ile Arg Val Asp Lys Glu  
 20 25 30  
 Lys Gly Tyr Ile Asp Leu Ser Lys Arg Arg Val Ser Pro Glu Glu Ala  
 35 40 45  
 Ile Lys Cys Glu Asp Lys Phe Thr Lys Ser Lys Thr Val Tyr Ser Ile  
 50 55 60  
 Leu Arg His Val Ala Glu Val Leu Glu Tyr Thr Lys Asp Glu Gln Leu  
 65 70 75 80  
 Glu Ser Leu Phe Gln Arg Thr Ala Trp Val Phe Asp Asp Lys Tyr Lys  
 85 90 95  
 Arg Pro Gly Tyr Gly Ala Tyr Asp Ala Phe Lys His Ala Val Ser Asp  
 100 105 110  
 Pro Ser Ile Leu Asp Ser Leu Asp Leu Asn Glu Asp Glu Arg Glu Val  
 115 120 125  
 Leu Ile Asn Asn Ile Asn Arg Arg Leu Thr Pro Gln Ala Val Lys Ile

5222

130	135	140
Arg Ala Asp Ile Glu Val	Ala Cys Tyr Gly Tyr Glu Gly Ile Asp Ala	
145	150	155 160
Val Lys Glu Ala Leu Arg	Ala Gly Leu Asn Cys Ser Thr Glu Asn Met	
	165	170 175
Pro Ile Lys Ile Asn Leu	Ile Ala Pro Pro Arg Tyr Val Met Thr Thr	
	180	185 190
Thr Thr Leu Glu Arg Thr	Glu Gly Leu Ser Val Leu Ser Gln Ala Met	
	195	200 205
Ala Val Ile Lys Glu Lys	Ile Glu Glu Lys Arg Gly Val Phe Asn Val	
	210	215 220
Gln Met Glu Pro Lys Val	Val Thr Asp Thr Asp Glu Thr Glu Leu Ala	
	225	230 235 240
Arg Gln Met Glu Arg Leu	Glu Arg Glu Asn Ala Glu Val Asp Gly Asp	
	245	250 255
Asp Asp Ala Glu Glu Met	Glu Ala Lys Ala Glu Asp	
	260	265

&lt;210&gt; 5942

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5942

Ser Arg Glu Ile Asp Ile	Ile His Val Ile Lys Asn Met Gly Phe Asn
1	5 10 15
Leu Thr Phe His Leu Ser	Tyr Lys Phe Arg Leu Leu Leu Leu Leu Thr
	20 25 30
Leu Cys Leu Thr Val Val	Gly Trp Ala Thr Ser Asn Tyr Phe Val Gly
	35 40 45
Ala Ile Gln Glu Ile Pro	Lys Ala Lys Glu Phe Met Ala Asn Phe His
	50 55 60
Lys Thr Leu Ile Leu Gly	Lys Gly Lys Thr Leu Thr Asn Glu Ala Ser
	65 70 75 80
Thr Lys Lys Val Glu Leu	Asp Asn Cys Pro Ser Val Ser Pro Tyr Leu
	85 90 95

## 5223

Arg Gly Gln Ser Lys Leu Ile Phe Lys Pro Asp Leu Thr Leu Glu Glu  
 100 105 110  
 Val Gln Ala Glu Asn Pro Lys Val Ser Arg Gly Arg Tyr Arg Pro Gln  
 115 120 125  
 Glu Cys Lys Ala Leu Gln Arg Val Ala Ile Leu Val Pro His Arg Asn  
 130 135 140  
 Arg Glu Lys His Leu Met Tyr Leu Leu Glu His Leu His Pro Phe Leu  
 145 150 155 160  
 Gln Arg Gln Gln Leu Asp Tyr Gly Ile Tyr Val Ile His Gln Ala Glu  
 165 170 175  
 Gly Lys Lys Phe Asn Arg Ala Lys Leu Leu Asn Val Gly Tyr Leu Glu  
 180 185 190  
 Ala Leu Lys Glu Glu Asn Trp Asp Cys Phe Ile Phe His Asp Val Thr  
 195 200 205  
 Trp Tyr Pro Arg Met Thr Leu Thr Phe Thr Ser Val Arg Ser Ile Pro  
 210 215 220  
 Ser Ile Trp Trp Leu Ala Gly Thr Ala Leu Gly Thr Gly Tyr Val Thr  
 225 230 235 240  
 Val Asp Ile Leu Gly Val Leu Leu Pro  
 245

&lt;210&gt; 5943

&lt;211&gt; 25

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5943

Gln Ala Pro Arg Arg Pro Ser Pro Ala Ser Leu Cys Gly Pro Arg Arg  
 1 5 10 15

Pro Ala Ala Pro Glu Leu Leu Thr Val  
 20 25

&lt;210&gt; 5944

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

5224

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5944

Gln Gly Gly Asp Pro Trp Val Val Arg Gln Leu Trp Val Asn Phe Val  
 1 5 10 15

Ser Thr Leu Ser Arg Gly Lys Phe Gly Leu Ser Pro Gly Val His Thr  
 20 25 30

Ala Ala Ala Thr Gln Cys Ala Thr Tyr His Phe Phe Leu Xaa Cys Phe  
 35 40 45

Val Leu Phe Leu Lys Asp His Phe Ile Leu Lys Arg Lys Ala Asp Pro  
 50 55 60

Ser Lys His Glu Ser Ile  
 65 70

&lt;210&gt; 5945

&lt;211&gt; 409

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (3)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5945

Pro Val Xaa Pro Arg Val Arg Arg Arg Arg Ala Lys Val Gln Gln Gly  
 1 5 10 15

Ala Val Gly Arg Ala Arg Arg Phe Pro Ala Arg Val Ser Ala Arg Gly  
 20 25 30

Ser Ala Pro Gly Pro Gly Leu Gly Gly Ala Gly Ala Leu Asp Pro Pro  
 35 40 45

Ala Val Val Ala Glu Ser Val Ser Ser Leu Thr Ile Ala Asp Ala Phe  
 50 55 60

Ile Ala Ala Gly Glu Ser Ser Ala Pro Thr Pro Pro Arg Pro Ala Leu  
 65 70 75 80

Pro Arg Arg Phe Ile Cys Ser Phe Pro Asp Cys Ser Ala Asn Tyr Ser

## 5225

85										90					95									
Lys	Ala	Trp	Lys	Leu	Asp	Ala	His	Leu	Cys	Lys	His	Thr	Gly	Glu	Arg									
100										105					110									
Pro	Phe	Val	Cys	Asp	Tyr	Glu	Gly	Cys	Gly	Lys	Ala	Phe	Ile	Arg	Asp									
115										120					125									
Tyr	His	Leu	Ser	Arg	His	Ile	Leu	Thr	His	Thr	Gly	Glu	Lys	Pro	Phe									
130										135					140									
Val	Cys	Ala	Ala	Asn	Gly	Cys	Asp	Gln	Lys	Phe	Asn	Thr	Lys	Ser	Asn									
145										150					155					160				
Leu	Lys	Lys	His	Phe	Glu	Arg	Lys	His	Glu	Asn	Gln	Gln	Lys	Gln	Tyr									
165										170					175									
Ile	Cys	Ser	Phe	Glu	Asp	Cys	Lys	Lys	Thr	Phe	Lys	Lys	His	Gln	Gln									
180										185					190									
Leu	Lys	Ile	His	Gln	Cys	Gln	His	Thr	Asn	Glu	Pro	Leu	Phe	Lys	Cys									
195										200					205									
Thr	Gln	Glu	Gly	Cys	Gly	Lys	His	Phe	Ala	Ser	Pro	Ser	Lys	Leu	Lys									
210										215					220									
Arg	His	Ala	Lys	Ala	His	Glu	Gly	Tyr	Val	Cys	Gln	Lys	Gly	Cys	Ser									
225										230					235					240				
Phe	Val	Ala	Lys	Thr	Trp	Thr	Glu	Leu	Leu	Lys	His	Val	Arg	Glu	Thr									
245										250					255									
His	Lys	Glu	Glu	Ile	Leu	Cys	Glu	Val	Cys	Arg	Lys	Thr	Phe	Lys	Arg									
260										265					270									
Lys	Asp	Tyr	Leu	Lys	Gln	His	Met	Lys	Thr	His	Ala	Pro	Glu	Arg	Asp									
275										280					285									
Val	Cys	Arg	Cys	Pro	Arg	Glu	Gly	Cys	Gly	Arg	Thr	Tyr	Thr	Thr	Val									
290										295					300									
Phe	Asn	Leu	Gln	Ser	His	Ile	Leu	Ser	Phe	His	Glu	Glu	Ser	Arg	Pro									
305										310					315					320				
Phe	Val	Cys	Glu	His	Ala	Gly	Cys	Gly	Lys	Thr	Phe	Ala	Met	Lys	Gln									
325										330					335									
Ser	Leu	Thr	Arg	His	Ala	Val	Val	His	Asp	Pro	Asp	Lys	Lys	Lys	Met									
340										345					350									
Lys	Leu	Lys	Val	Lys	Lys	Ser	Arg	Glu	Lys	Arg	Ser	Leu	Ala	Ser	His									

## 5226

355                      360                      365  
 Leu Ser Gly Tyr Ile Pro Pro Lys Arg Lys Gln Gly Gln Gly Leu Ser  
     370                      375                      380  
 Leu Cys Gln Asn Gly Glu Ser Pro Asn Cys Val Glu Asp Lys Met Leu  
     385                      390                      395                      400  
 Ser Thr Val Ala Val Leu Thr Leu Gly  
                                  405

&lt;210&gt; 5946

&lt;211&gt; 84

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (81)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5946

Lys Arg Met Ala Ala Leu Phe Leu Lys Arg Leu Thr Leu Gln Thr Val  
     1                      5                      10                      15  
 Lys Ser Glu Asn Ser Cys Ile Arg Cys Phe Gly Lys His Ile Leu Gln  
                          20                      25                      30  
 Lys Thr Ala Pro Ala Gln Leu Ser Pro Ile Ala Ser Ala Pro Arg Leu  
                  35                      40                      45  
 Ser Phe Leu Ile His Ala Lys Ala Phe Ser Thr Ala Glu Asp Thr Gln  
          50                      55                      60  
 Asn Glu Gly Lys Lys Thr Lys Lys Xaa Lys Thr Ala Phe Ser Asn Val  
     65                      70                      75                      80

Xaa Lys Lys Asn

&lt;210&gt; 5947

&lt;211&gt; 288



## 5227

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (78)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (79)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5947

Asp	Val	Ile	Arg	Arg	Thr	Val	Glu	Glu	Arg	Lys	Leu	Lys	Leu	Glu	Met
1				5					10					15	

Glu	Lys	Gln	Glu	Phe	Glu	Gln	Leu	Arg	Gln	Glu	Met	Gly	Glu	Glu	Glu
		20					25					30			

Glu	Glu	Asn	Glu	Thr	Phe	Gly	Leu	Ser	Arg	Glu	Tyr	Glu	Glu	Leu	Ile
		35					40				45				

Lys	Leu	Lys	Arg	Ser	Gly	Ser	Ile	Gln	Ala	Lys	Asn	Leu	Lys	Ser	Lys
	50					55					60				

Phe	Glu	Lys	Ile	Gly	Gln	Leu	Ser	Glu	Lys	Glu	Ile	Gln	Xaa	Xaa	Ile
65					70					75					80

Glu	Glu	Glu	Arg	Ala	Arg	Arg	Arg	Ala	Ile	Asp	Leu	Glu	Ile	Lys	Glu
				85				90						95	

Arg	Glu	Ala	Glu	Asn	Phe	His	Glu	Glu	Asp	Asp	Val	Asp	Val	Arg	Pro
			100					105					110		

Ala	Arg	Lys	Ser	Glu	Ala	Pro	Phe	Thr	His	Lys	Val	Asn	Met	Lys	Ala
		115					120					125			

Arg	Phe	Glu	Gln	Met	Ala	Lys	Ala	Arg	Glu	Glu	Glu	Glu	Gln	Arg	Arg
	130					135					140				

Ile	Glu	Glu	Gln	Lys	Leu	Leu	Arg	Met	Gln	Phe	Glu	Gln	Arg	Glu	Ile
145					150					155					160

Asp	Ala	Ala	Leu	Gln	Lys	Lys	Arg	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Gly
				165				170						175	

Ser	Ile	Met	Asn	Gly	Ser	Thr	Ala	Glu	Asp	Glu	Glu	Gln	Thr	Arg	Ser
			180					185					190		

Gly	Ala	Pro	Trp	Phe	Lys	Lys	Pro	Leu	Lys	Asn	Thr	Ser	Val	Val	Asp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5228

195	200	205
Ser Glu Pro Val Arg Phe Thr Val Lys Val Thr Gly Glu Pro Lys Pro		
210	215	220
Glu Ile Thr Trp Trp Phe Glu Gly Glu Ile Leu Gln Asp Gly Glu Asp		
225	230	235 240
Tyr Gln Tyr Ile Glu Arg Gly Glu Thr Tyr Cys Leu Tyr Leu Pro Glu		
245	250	255
Thr Phe Pro Glu Asp Gly Gly Glu Tyr Met Cys Lys Ala Val Asn Asn		
260	265	270
Lys Gly Ser Ala Ala Ser Thr Cys Ile Leu Thr Ile Glu Ser Lys Asn		
275	280	285

&lt;210&gt; 5948

&lt;211&gt; 98

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (15)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (31)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (66)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

5229

&lt;400&gt; 5948

Trp His Tyr Gly Met Tyr Gly Gln Ala Xaa Pro Cys Gln Glu Xaa Ile  
 1 5 10 15  
 Pro Gly Met Val Glu Ser Phe Ile Xaa Asn Gly Trp Phe Ser Xaa Tyr  
 20 25 30  
 Ala Lys Arg Pro Met Ser Asn Pro Leu Leu Leu Ile Pro Ala Ala Trp  
 35 40 45  
 Gly Leu Val Pro Val Val Pro Gln Lys Cys Gly Pro Arg Thr Gln Pro  
 50 55 60  
 Val Xaa Ala Ser Ser Gly Asn Leu Val Lys Lys Cys Lys Leu Leu Gly  
 65 70 75 80  
 Pro Thr Leu Asn Leu Leu Asn His Lys Leu Cys Phe Asn Lys Gln Pro  
 85 90 95  
 Ala Leu

&lt;210&gt; 5949

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5949

Val Pro Asp Phe Gln Gly Gln Gln Phe Ile Leu Glu Lys Gly Asp Tyr  
 1 5 10 15  
 Pro Arg Trp Ser Ala Trp Ser Gly Ser Ser Ser His Asn Ser Asn Gln  
 20 25 30  
 Leu Leu Ser Phe Arg Pro Val Leu Cys Ala Asn His Asn Asp Ser Arg  
 35 40 45  
 Val Thr Leu Phe Glu Gly Asp Asn Phe Gln Gly Cys Lys Phe Asp Leu  
 50 55 60  
 Val Asp Asp Tyr Pro Ser Leu Pro Ser Met Gly Trp Ala Ser Lys Asp  
 65 70 75 80  
 Val Gly Ser Leu Lys Val Ser Ser Gly Ala Trp Val Ala Tyr Gln Tyr  
 85 90 95  
 Pro Gly Tyr Arg Gly Tyr Gln Tyr Val Leu Glu Arg Asp Arg His Ser  
 100 105 110

## 5230

Gly Glu Phe Cys Thr Tyr Gly Glu Leu Gly Thr Gln Ala His Thr Gly  
 115 120 125

Gln Leu Gln Ser Ile Arg Arg Val Gln His  
 130 135

<210> 5950

<211> 196

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (158)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5950

Lys Lys Asp Phe Phe Gly Lys Ser Asp Pro Phe Leu Val Phe Tyr Arg  
 1 5 10 15

Ser Asn Glu Asp Gly Thr Phe Thr Ile Cys His Lys Thr Glu Val Val  
 20 25 30

Lys Asn Thr Leu Asn Pro Val Trp Gln Pro Phe Ser Ile Pro Val Arg  
 35 40 45

Ala Leu Cys Asn Gly Asp Tyr Asp Arg Thr Val Lys Ile Asp Val Tyr  
 50 55 60

Asp Trp Asp Arg Asp Gly Ser His Asp Phe Ile Gly Glu Phe Thr Thr  
 65 70 75 80

Ser Tyr Arg Glu Leu Ser Lys Ala Gln Asn Gln Phe Thr Val Tyr Glu  
 85 90 95

Val Leu Asn Pro Arg Lys Lys Cys Lys Lys Lys Lys Tyr Val Asn Ser  
 100 105 110

Gly Thr Val Thr Leu Leu Ser Phe Ser Val Asp Ser Glu Phe Thr Phe  
 115 120 125

Val Asp Tyr Ile Lys Gly Gly Thr Gln Leu Asn Phe Thr Val Ala Ile  
 130 135 140

Asp Phe Thr Ala Ser Asn Gly Asn Pro Leu Gln Pro Thr Xaa Leu His  
 145 150 155 160

Tyr Met Ser Pro Tyr Gln Leu Ser Ala Tyr Ala Met Ala Leu Lys Ala

## 5231

	165		170		175
Val Gly Glu Ile Ile Gln Asp Tyr Asp Ser Asp Lys Leu Phe Pro Ala					
	180		185		190
Tyr Gly Phe Gly					
	195				

&lt;210&gt; 5951

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (80)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5951

Lys Glu His Leu Met Cys Trp Ala Phe Tyr Arg Leu Thr Leu Thr Ser
1 5 10 15

Gln Ala Glu Leu Tyr Thr Phe Ser Phe Thr Thr Ile Ser Ile Leu Ile
20 25 30

Asn Tyr Gly Phe Met Leu Leu Lys Thr Ile Tyr Asn Ala Asp His Tyr
35 40 45

Tyr Lys Cys Val Val Leu Thr Asn Cys Thr Glu Thr Ala Leu Ser Leu
50 55 60

Tyr Ser Val Trp Ile Phe Gly Glu Asn Asn Lys Cys Ser Gln Glu Xaa
65 70 75 80

Leu Leu Arg Gly Arg Leu Cys Glu Trp Ile Thr Leu Lys Ala Ala Phe
85 90 95

Glu Thr Pro Val Ser Gly Ile Ser Cys Ile Leu Ala Trp Arg Pro Asp
100 105 110

Val Asn Leu Thr Ser Ser Lys Asn Thr Arg Phe Pro
115 120

&lt;210&gt; 5952

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

5232

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (118)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5952

Thr Phe Ala Gly Leu Cys His Ile Pro Leu Ala Val Ser Ser Glu Glu  
 1 5 10 15

Ala Pro Phe Ala Leu Gly Asn Gly Ser Val Ser His Trp Phe Ile Ser  
 20 25 30

Leu Glu Leu Phe Gly Ser Gln Ile Cys Phe Phe Glu Asn Leu Ser Trp  
 35 40 45

Gly Arg Leu Gln Val Val Asn Arg Gly Val Gly Val Gly Gly Gly Val  
 50 55 60

His Tyr Leu Gly Leu Leu Gly Ala Ser Arg Phe Ser Gly Arg Arg Ile  
 65 70 75 80

His Cys Val Leu Leu Leu Phe Pro Trp Pro Gly Leu Pro Ala Ser Leu  
 85 90 95

Cys His Pro Ala Trp Gly Lys Ala Pro Thr Gly Ile Val Ser Pro Leu  
 100 105 110

His Ala Ser Leu Ala Xaa Lys Ser Gln Lys Lys Ser Lys Thr Gly Arg  
 115 120 125

Lys

&lt;210&gt; 5953

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (21)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (99)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

## 5233

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (175)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5953

Val	Leu	Glu	Pro	Gln	Asn	Val	Asp	Pro	Ser	Met	Val	Gln	Met	Thr	Phe
1				5					10				15		

Leu	Asp	Asp	Val	Xaa	His	Ser	Leu	Leu	Lys	Gly	Glu	Asn	Ile	Gly	Ile
			20					25					30		

Thr	Ser	Arg	Arg	Arg	Ser	Arg	Ala	Asn	Gln	Asn	Val	Asn	Ala	Val	His
		35					40					45			

Ser	His	Tyr	Thr	Arg	Ala	Gln	Ala	Asn	Ser	Pro	Arg	Pro	Ala	Met	Asn
	50					55					60				

Ser	Gln	Ala	Ala	Val	Pro	Lys	Gln	Asn	Thr	His	Gln	Gln	Gln	Gln	Gln
65					70				75						80

Arg	Ser	Ile	Arg	Pro	Asn	Lys	Arg	Lys	Gly	Ser	Asp	Ser	Ser	Ile	Pro
				85					90					95	

Asp	Glu	Xaa	Lys	Met	Lys	Glu	Glu	Lys	Tyr	Asp	Tyr	Ile	Ser	Arg	Gly
			100					105					110		

Glu	Asn	Pro	Lys	Gly	Lys	Asn	Lys	His	Leu	Met	Asn	Lys	Arg	Arg	Lys
		115					120					125			

Pro	Glu	Glu	Asp	Glu	Lys	Lys	Leu	Asn	Met	Lys	Arg	Leu	Arg	Thr	Asp
	130					135					140				

Asn	Val	Ser	Asp	Phe	Ser	Glu	Ser	Ser	Asp	Ser	Glu	Asn	Ser	Asn	Lys
145					150					155					160

Arg	Ile	Ile	Asp	Asn	Ser	Ser	Glu	Gln	Lys	Pro	Glu	Asn	Glu	Xaa	Lys
				165					170					175	

Lys Lys Tyr

&lt;210&gt; 5954

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

## 5234

&lt;222&gt; (32)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5954

Ala Gly Phe Cys Val Val Gln Leu Arg Thr Cys Phe Ser Arg Gln Arg  
 1 5 10 15

Phe Lys Ile Ser Gly Asp Gly Ile Arg Asn Gly Asn Ala Glu Arg Xaa  
 20 25 30

Gly Arg Gly Gly Leu Tyr Pro Gly His Pro Gln Gly Gly Arg Arg Ala  
 35 40 45

Lys Lys Arg Gln Ala Glu Gln Leu Ser Ala Ala Gly Glu Gly Gly Asp  
 50 55 60

Ala Gly Arg Met Asp Thr Glu Glu Ala Arg Pro Ala Lys Arg Pro Val  
 65 70 75 80

Phe Pro Pro Leu Cys Gly Asp Gly Leu Leu Ser Gly Lys Glu Glu Thr  
 85 90 95

Arg Lys Ile Pro Val Pro Ala Asn Arg Tyr Thr Pro Leu Lys Glu Asn  
 100 105 110

Trp Met Lys Ile Phe Thr Pro Ile Val Glu His Leu Gly Leu Gln Ile  
 115 120 125

Arg Phe Asn Leu Lys Ser Arg Asn Val Glu Ile Arg Thr Cys Lys Glu  
 130 135 140

Thr Lys Asp Val Ser Ala Leu Thr Lys Ala Ala Asp Phe Val Lys Ala  
 145 150 155 160

Phe Ile Leu Gly Phe Gln Val Glu Asp Ala Leu Ala Leu Ile Arg Leu  
 165 170 175

Asp Asp Leu Phe Leu Glu Ser Phe Glu Ile Thr Asp Val Lys Pro Leu  
 180 185 190

Lys Gly Asp His Leu Ser Arg Ala Ile Gly Arg Ile Ala Gly Lys Gly  
 195 200 205

Gly Lys Thr Lys Phe Thr Ile Glu Asn Val Thr Arg Thr Arg Ile Val  
 210 215 220

Leu Ala Asp Val Lys Val His Ile Leu Gly Ser Phe Gln Asn Ile Lys  
 225 230 235 240

Met Ala Arg Thr Ala Ile Cys Asn Leu Ile Leu Gly Asn Pro Pro Ser  
 245 250 255



5235

Lys Val Tyr Gly Asn Ile Arg Ala Val Ala Ser Arg Ser Ala Asp Arg  
                   260                                  265                                  270

Phe

<210> 5955  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

<400> 5955  
 Arg Met Glu Arg Ser Leu Lys Gly Ile Phe Ile Lys Gln Val Leu Glu  
   1                                  5                                  10                                  15  
 Asp Ser Pro Ala Gly Lys Thr Asn Ala Leu Lys Thr Gly Asp Lys Ile  
                   20                                  25                                  30  
 Leu Glu Val Ser Gly Val Asp Leu Gln Asn Ala Ser His Ser Glu Ala  
                   35                                  40                                  45  
 Val Glu Ala Ile Lys Asn Ala Gly Asn Pro Val Val Phe Ile Val Gln  
                   50                                  55                                  60  
 Ser Leu Ser Ser Thr Pro Arg Val Ile Pro Asn Val His Asn Lys Ala  
   65                                  70                                  75                                  80  
 Asn Lys Ile Thr Gly Asn Gln Asn Gln Asp Thr Gln  
                                   85                                  90

<210> 5956  
 <211> 203  
 <212> PRT  
 <213> Homo sapiens

<400> 5956  
 Asn Ser Ala Arg Gly Asp Gln Glu Ser Thr Cys Ala Glu Val Leu Val  
   1                                  5                                  10                                  15  
 Ile Trp Ser Leu Phe Pro Ser Gly Tyr Gln Leu Pro Ser Ala Ala Gln  
                   20                                  25                                  30  
 Ala Val Val Pro Glu Ala Arg Gly Arg Ser Gln Thr Cys Gly Asn Phe  
                   35                                  40                                  45  
 Ala Val Tyr Leu Gln Gly Cys Cys Phe Gln Gln Asp Pro Lys Leu Glu

50					55					60					
Lys 65	Glu	Glu	Glu	Glu	Thr 70	Asp	Pro	Ile	Ser	Ala 75	Arg	Ser	His	Cys	Ile 80
Gln	Arg	Arg	Ile	Ser 85	Lys	Lys	Glu	Lys	Lys 90	Glu	Gly	Arg	Glu	Val	Asp 95
Arg	Tyr	Lys	Met 100	Lys	Ser	Cys	Gln	Lys 105	Met	Glu	Gly	Lys	Pro 110	Glu	Asn
Glu	Ser	Glu 115	Pro	Lys	His	Glu	Glu 120	Glu	Pro	Lys	Pro	Glu 125	Glu	Lys	Pro
Glu 130	Glu	Glu	Glu	Lys	Leu	Glu 135	Glu	Glu	Ala	Lys	Ala 140	Lys	Gly	Thr	Phe
Arg 145	Glu	Arg	Leu	Ile 150	Gln	Ser	Leu	Gln	Glu	Phe 155	Lys	Glu	Asp	Ile	His 160
Asn	Arg	His	Leu	Ser 165	Asn	Glu	Asp	Met	Phe 170	Arg	Glu	Val	Asp	Glu 175	Ile
Asp	Glu	Ile	Arg	Arg	Val	Arg	Asn	Lys 185	Leu	Ile	Val	Met	Arg 190	Trp	Lys
Val	Asn 195	Arg	Asn	His	Pro	Tyr	Pro	Tyr	Leu	Met					
					200										

<213> Homo sapiens

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

5237

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (71)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5957

Trp Ala Leu Cys Thr Asn Cys Phe Ser Pro Ser Pro Leu Asp Leu Arg  
 1 5 10 15

Ile Lys His Pro Val Leu Lys Leu Ile Cys Cys Ser Phe Val Asn Ile  
 20 25 30

Ser Leu Arg Phe Ser Leu Arg Val Arg Xaa Asn Ile Ser Glu Pro Lys  
 35 40 45

Val Pro Tyr Thr Thr Leu Ala Tyr Tyr Ser Xaa Xaa Phe Lys Gly Phe  
 50 55 60

Arg Ile Phe Gly Ser His Xaa Lys Ser Val Phe Ile Met  
 65 70 75

&lt;210&gt; 5958

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5958

Cys Asn Asp His Lys Ile Ala Trp Lys Ile Val Ile Gln Ile Ser Thr  
 1 5 10 15

Met Asn Ser Xaa Pro Lys Phe Phe Phe Pro Met Ile Lys Val Val Asp  
 20 25 30

&lt;210&gt; 5959

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5959

## 5238

Asn Gln Val Tyr Phe Leu Met Ala Phe Ile Thr Leu Thr His Lys Val  
 1 5 10 15  
 Thr Asp Gln Cys Ile Ser Tyr Gly Tyr Arg Pro Arg Ala Leu Glu Gly  
 20 25 30  
 Gly Gly Leu Leu Lys His Met Gln Lys Lys Lys Lys Lys Lys Phe Cys  
 35 40 45  
 Ile Tyr Asn His Phe Asn Leu Leu  
 50 55

<210> 5960  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 5960  
 Gly Tyr Val Cys Glu Phe Leu Gly Asn Leu Ser Val Leu Asp Ala Ser  
 1 5 10 15  
 Leu Gln Gln Gly Pro Leu Leu Ala Met Asp Gly Pro Gly Arg Ser Leu  
 20 25 30  
 Glu Ile Thr His Leu Lys Asn Glu Gly Pro Met Lys Val Phe Gly Cys  
 35 40 45  
 Leu Leu Met Pro Leu Leu Leu Thr Leu Leu Phe Ala Tyr Phe Gln Asn  
 50 55 60  
 Ile Ile Lys Cys Gln His Ile Ile Ser Glu Arg Gln Val Gly Val Gly  
 65 70 75 80  
 Glu Lys

<210> 5961  
 <211> 77  
 <212> PRT  
 <213> Homo sapiens

<400> 5961  
 Phe Val Thr Cys His Asn Thr Lys Gln Val Thr Glu Glu Thr Ile Met  
 1 5 10 15  
 Gly Pro Arg Gly Arg Cys Leu Tyr His Val Asp Lys Ile Gln Ser Ser  
 20 25 30

## 5239

Leu Phe Gln Thr Lys His Phe Ala Leu Glu Thr Phe Glu Thr Ser Met  
                   35                                  40                                  45

Ala Val Glu Tyr Ser Arg Asp Asp Leu Lys Ile Leu Glu Ala Val Glu  
                   50                                  55                                  60

Val Pro Val Val Gly Ala Arg His Gly Ser Gly Asp Pro  
                   65                                  70                                  75

<210> 5962

<211> 170

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (170)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5962

Ala Asp Ala Trp Val Asp Tyr Ser Glu Asp Lys Ser Ser Trp Asp Asn  
                   1                                  5                                  10                                  15

Gln Gln Glu Asn Pro Pro Pro Thr Lys Lys Ile Gly Lys Lys Pro Val  
                                   20                                  25                                  30

Ala Lys Met Pro Leu Arg Arg Pro Lys Met Lys Lys Thr Pro Glu Lys  
                   35                                  40                                  45

Leu Asp Asn Thr Pro Ala Ser Pro Pro Arg Ser Pro Ala Glu Pro Asn  
                   50                                  55                                  60

Asp Ile Pro Ile Ala Lys Gly Thr Tyr Thr Phe Asp Ile Asp Lys Trp  
                   65                                  70                                  75                                  80

Asp Asp Pro Asn Phe Asn Pro Phe Ser Ser Thr Ser Lys Met Gln Glu  
                                   85                                  90                                  95

Ser Pro Lys Leu Pro Gln Gln Ser Tyr Asn Phe Asp Pro Asp Thr Cys  
                                   100                                  105                                  110

Asp Glu Ser Val Asp Pro Phe Lys Thr Ser Ser Lys Thr Pro Ser Ser  
                   115                                  120                                  125

Pro Ser Lys Ser Pro Ala Ser Phe Glu Ile Pro Ala Ser Ala Met Glu  
                   130                                  135                                  140

Ala Asn Gly Val Asp Gly Asp Gly Leu Asn Lys Pro Ala Lys Lys Lys

145                      150                      155                      160

Lys Thr Pro Leu Lys Thr Glu His Leu Xaa  
                        165                      170

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<400> 5963
Leu Ile Ala Gly Ile Gln His Gly Cys Gln Asp Ile Gly Ala Arg Ser
 1             5             10             15
Leu Ser Val Leu Arg Ser Met Met Tyr Ser Gly Glu Leu Lys Phe Glu
          20             25             30
Lys Arg Thr Met Ser Ala Gln Ile Glu Gly Gly Val His Gly Leu His
          35             40             45
Ser Tyr Glu Lys Arg Leu Tyr
          50             55

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<210> 5964
<211> 493
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (156)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (165)
<223> Xaa equals any of the naturally occurring L-amino acids
```

## 5241

<220>  
 <221> SITE  
 <222> (359)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (434)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (436)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (468)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (471)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (473)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (488)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 5964  
 Val Ile Arg Gly Gly Ser Asn Arg Arg Gly Glu Gly Glu Val Ile Pro  
 1 5 10 15  
 Glu Glu Ser Arg Leu Gly Arg Thr Arg Trp Pro Gly Asn Arg Val Ile  
 20 25 30  
 Arg Glu Met Lys Pro Thr Gly Thr Asp Pro Arg Ile Leu Ser Ile Ala  
 35 40 45  
 Ala Glu Val Ala Lys Ser Pro Glu Gln Asn Val Pro Val Ile Leu Leu  
 50 55 60  
 Lys Leu Lys Glu Ile Ile Asn Ile Thr Pro Leu Gly Ser Ser Glu Leu  
 65 70 75 80

## 5242

Lys Lys Ile Lys Gln Asp Ile Tyr Cys Tyr Asp Leu Ile Gln Tyr Cys  
                     85                    90                    95  
 Leu Leu Val Leu Ser Gln Asp Tyr Ser Arg Ile Gln Gly Gly Trp Xaa  
                     100                    105                    110  
 Thr Ile Ser Gln Leu Thr Gln Ile Leu Ser His Cys Cys Val Gly Leu  
                     115                    120                    125  
 Glu Pro Gly Glu Asp Ala Xaa Glu Phe Tyr Asn Glu Leu Leu Pro Ser  
                     130                    135                    140  
 Ala Ala Glu Asn Phe Leu Val Leu Gly Arg Gln Xaa Gln Thr Cys Phe  
                     145                    150                    155                    160  
 Ile Asn Ala Ala Xaa Ala Glu Glu Lys Asp Glu Leu Leu His Phe Phe  
                     165                    170                    175  
 Gln Ile Val Thr Asp Ser Leu Phe Trp Leu Leu Gly Gly His Val Glu  
                     180                    185                    190  
 Leu Ile Gln Asn Val Leu Gln Ser Asp His Phe Leu His Leu Leu Gln  
                     195                    200                    205  
 Ala Asp Asn Val Gln Ile Gly Ser Ala Val Met Met Met Leu Gln Asn  
                     210                    215                    220  
 Ile Leu Gln Ile Asn Ser Gly Asp Leu Leu Arg Ile Gly Arg Lys Ala  
                     225                    230                    235                    240  
 Leu Tyr Ser Ile Leu Asp Glu Val Ile Phe Lys Leu Phe Ser Thr Pro  
                     245                    250                    255  
 Ser Pro Val Ile Arg Ser Thr Ala Thr Lys Leu Leu Leu Leu Met Ala  
                     260                    265                    270  
 Glu Ser His Gln Glu Ile Leu Ile Leu Leu Arg Gln Ser Thr Cys Tyr  
                     275                    280                    285  
 Lys Gly Leu Arg Arg Leu Leu Ser Lys Gln Glu Thr Gly Thr Glu Phe  
                     290                    295                    300  
 Ser Gln Glu Leu Arg Gln Leu Val Gly Leu Leu Ser Pro Met Val Tyr  
                     305                    310                    315                    320  
 Gln Glu Val Glu Glu Gln Lys Leu His Gln Ala Ala Cys Leu Ile Gln  
                     325                    330                    335  
 Ala Tyr Trp Lys Gly Phe Gln Thr Arg Lys Arg Leu Lys Lys Leu Pro  
                     340                    345                    350



## 5243

Ser Ala Val Ile Ala Leu Xaa Arg Ser Phe Arg Ser Lys Arg Ser Lys  
                   355                                  360                                  365

Met Leu Leu Glu Ile Asn Arg Gln Lys Glu Glu Glu Asp Leu Lys Leu  
                   370                                  375                                  380

Gln Leu Gln Leu Gln Arg Gln Arg Ala Met Arg Leu Ser Arg Glu Leu  
                   385                                  390                                  395                                  400

Gln Leu Ser Met Leu Glu Ile Val His Pro Gly Gln Val Glu Lys His  
                                   405                                  410                                  415

Tyr Arg Glu Met Gly Arg Glu Ile Ser Thr Asp Tyr Pro Glu Thr Leu  
                                   420                                  425                                  430

Glu Xaa Val Xaa Gly Lys Glu Lys Phe Ser Pro Thr Glu Ala Val Ser  
                                   435                                  440                                  445

His Arg Ser Ile Lys Ala Thr Val Thr Leu Gln Lys Ser Lys Arg Phe  
                                   450                                  455                                  460

Lys Phe Leu Xaa Glu Ile Xaa Arg Xaa Glu Lys Arg Lys Leu Phe Cys  
                                   465                                  470                                  475                                  480

Leu Pro Trp Ala Lys Gly Pro Xaa Lys Glu Thr Ser Thr  
                                   485                                  490

<210> 5965

<211> 47

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5965

Leu Phe Val Cys Xaa Phe Leu Val Ala Arg Ser Asp Pro Arg Ile Phe  
           1                                  5                                  10                                  15

Leu Leu Ser Arg Glu Thr Arg Arg Ile Met Arg Leu Phe Leu Val Ala  
                                   20                                  25                                  30

Phe Gln Glu Tyr Glu Glu Lys Asn Gly Ser Gln Ser Gly Phe Glu  
                                   35                                  40                                  45

5244

&lt;210&gt; 5966

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5966

Leu His Lys Thr Leu Val Arg Tyr Gln Leu Leu His Arg Glu Ser Ser  
1 5 10 15

Tyr Thr Ile Pro Tyr Ile Phe Ile Tyr Leu Leu Phe Tyr Tyr Ser Arg  
20 25 30

Ile Thr Lys Leu Asp Ala Leu Ser Gln Phe Phe Ala Thr Glu Asn Tyr  
35 40 45

Leu Phe Leu Leu Pro Phe His Thr Pro Cys Ile Tyr Asp Gln Pro Leu  
50 55 60

His  
65

&lt;210&gt; 5967

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5967

Ala Lys Asn Ile Lys Gly Arg Glu Ile Gly Ile Gln Gly Asp Ser Val  
1 5 10 15

Gln Glu Ser Lys Pro Gly Ile Cys Leu Cys Gly Arg Pro Asn His Tyr  
20 25 30

Tyr Leu Asn Pro Leu Arg Lys Ala Phe Pro Ala Phe His Asn Ser Gly  
35 40 45

Ser Ser Phe Ile Lys Trp Glu Thr His Asn Cys Pro Thr Tyr Leu Thr  
50 55 60

Gly Val Leu  
65

&lt;210&gt; 5968

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

## 5245

&lt;400&gt; 5968

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Leu Glu Thr Ser Ala Val Tyr Ile Ser Leu Tyr Ser Phe Phe Ser Pro
 1             5             10             15

Leu Pro Met Met Phe Arg Asn Thr Thr Ile Leu Phe Ala Lys His Ser
          20             25             30

Asn Tyr Leu Ile Ser Lys Gln Val Leu Glu Tyr His Arg Asn His Lys
          35             40             45

Thr Ala His Gln Asn Met Pro His Ser Thr Ser Ser Glu Gln Ser Gly
          50             55             60

Lys Arg Thr Ser Arg Ser Trp Lys Ser Gly Leu Val Leu Ser Arg Ser
          65             70             75             80

Thr Lys Asn Leu Asn Ile Ser Asp Asn His Asn Thr Ser Leu Thr Trp
          85             90             95

Glu Arg Ala Val Ile Ile Phe His Arg Gly Gln Asp Gly Ser Leu Asp
          100             105             110

Glu Glu Val Asp Met Pro Phe Pro Asn Ser Arg Lys
          115             120

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&lt;210&gt; 5969

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5969

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Ile Cys Pro Arg Ser Pro Ser Lys Val Ser Val Ala Leu Arg Val Arg
 1             5             10             15

Thr Leu Ile Arg Leu Gly Arg Val Leu Glu Ser Leu Arg Arg Gln Glu
          20             25             30

Glu Cys Ala Glu Leu Ser Val Ser Gly Arg Leu Ile His Cys Trp Ala
          35             40             45

His Ile Lys Ala Pro Met Gly Ser Arg Pro Asp Cys Thr Trp Leu Phe
          50             55             60

Cys Trp Lys Lys Ser Met Ala Ala Gln Arg Thr Lys Ile Ser Ser Gly
          65             70             75             80

Lys Ala Ser Phe Asp Cys Gln
          85

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5246

&lt;210&gt; 5970

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5970

Met	Glu	Arg	Xaa	Gln	Val	Phe	Asn	Ser	Thr	Asn	Ile	Phe	Phe	Ser	Phe
1				5					10					15	

Val	Pro	Phe	Phe	Cys	Leu	Leu	Tyr	Thr	Asp	Ile	Pro	Thr	Leu	Ala	Thr
			20					25					30		

Ala	Gln	Arg	Gly	Ser	Tyr	Leu	Arg	Asn	Thr	Ala	Asp	Phe	Glu	Tyr	Leu
		35					40					45			

Val	Leu	Gln	Ser	His	Leu	Ser	Glu	Ala
	50					55		

&lt;210&gt; 5971

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (183)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5971

Glu	Lys	Lys	Lys	Thr	Leu	Lys	Lys	Lys	Ile	Pro	Lys	Tyr	His	Gln	Pro
1				5					10					15	

Arg	Lys	Glu	Lys	Arg	Arg	Gln	Lys	Pro	Leu	Gly	Gly	Phe	Gly	Lys	Glu
			20					25					30		

Ser	Lys	Glu	Lys	Glu	Pro	Lys	Thr	Lys	Gly	Lys	Asp	Ala	Lys	Asp	Gly
		35					40					45			

Lys	Lys	Asp	Ser	Ser	Ala	Ala	Gln	Pro	Gly	Val	Ala	Phe	Ser	Val	Asp
	50					55					60				

## 5247

Asn Thr Ile Lys Arg Pro Asn Pro Ala Pro Gly Thr Arg Lys Lys Ser  
 65 70 75 80  
 Ser Asn Ala Glu Val Ile Lys Glu Leu Asn Lys Cys Arg Glu Glu Asn  
 85 90 95  
 Ser Met Arg Leu Asp Leu Ser Lys Arg Ser Ile His Ile Leu Pro Ser  
 100 105 110  
 Ser Ile Lys Glu Leu Thr Gln Leu Thr Glu Leu Tyr Leu Tyr Ser Asn  
 115 120 125  
 Lys Leu Gln Ser Leu Pro Ala Glu Val Gly Cys Leu Val Asn Leu Met  
 130 135 140  
 Thr Leu Ala Leu Ser Glu Asn Ser Leu Thr Ser Leu Pro Asp Ser Leu  
 145 150 155 160  
 Asp Asn Leu Lys Lys Leu Arg Met Leu Asp Leu Arg His Asn Lys Leu  
 165 170 175  
 Arg Glu Ile Pro Ser Val Xaa Val  
 180

<210> 5972  
 <211> 58  
 <212> PRT  
 <213> Homo sapiens

<400> 5972  
 Ala His Pro Thr Arg Asn Tyr Val Lys Lys Lys Phe Lys Lys Glu Phe  
 1 5 10 15  
 Lys Gly Asp Tyr Ser Val Thr Val Thr Pro Gly Lys Leu Arg Thr Leu  
 20 25 30  
 Cys Glu Ile Asp Trp Pro Ala Leu Glu Val Gly Trp Pro Ser Glu Gly  
 35 40 45  
 Ser Leu Asp Arg Ser Leu Val Ser Lys Val  
 50 55

<210> 5973  
 <211> 35  
 <212> PRT  
 <213> Homo sapiens

## 5248

&lt;400&gt; 5973

Gly Gln Gln Phe Glu Thr Ser Leu Thr Ile Ser Thr Lys Cys Thr Lys  
 1 5 10 15

Val Ser Trp Ala Trp Trp Arg Ala Pro Val Ile Pro Ala Thr Trp Glu  
 20 25 30

Thr Asp Ala  
 35

&lt;210&gt; 5974

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5974

Arg Asn Ser Gly Phe Cys Cys Asn Arg Phe Ile Phe Leu Leu Phe Ser  
 1 5 10 15

Pro Ile Leu Ala Gln Ser Gly Ala Ile Val Leu Leu Val Arg Pro Ser  
 20 25 30

Leu Lys Met Arg Ser Arg Glu Ala Gly Pro Lys Leu Arg Arg Ile Gln  
 35 40 45

Glu Pro Ala Asn Gly Ser Pro Gly Ala Val Ser Glu Thr Gly Gly Tyr  
 50 55 60

Arg Glu Glu Arg Leu Ser Asp Ala Glu Ile Met Gly Lys Leu Leu Ala  
 65 70 75 80

Trp Leu Ala Val Gly Met  
 85

&lt;210&gt; 5975

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

## 5249

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5975

Ile Phe Ser Asn Leu Val Phe Phe Tyr Ile Ile Ile Ala Ser Leu Lys

1

5

10

15

Ile Val Leu Gln Ala Xaa His Gly Trp Val Thr Pro Val Tyr Leu Thr

20

25

30

Leu Trp Glu Ala Glu Ala Gly Lys His Leu Lys Ser Gly Xaa Gln Asn

35

40

45

Asn Pro Gly His Trp

50

<210> 5976

<211> 27

<212> PRT

<213> Homo sapiens

<400> 5976

Cys Leu Gly Ala Tyr Ala Asp Tyr Ser Leu Arg Gly Gly Val Glu Arg

1

5

10

15

Arg Arg Arg Tyr Ala Gly Arg Arg Val Leu Cys

20

25

<210> 5977

<211> 91

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (86)

<223> Xaa equals any of the naturally occurring L-amino acids

## 5250

&lt;400&gt; 5977

Val Ser Arg Leu Val Ser Lys Glu Phe Ser Lys Ser Trp Ser Cys Gly  
1 5 10 15

Gly Cys Ser Tyr Ala Ala Gly Ala Val Thr Glu Arg Gln Glu Gly Leu  
20 25 30

Gly Gly Lys Gly Arg Arg Leu Asn Gln Ala Pro Ala Trp Thr Trp Ala  
35 40 45

Cys Val Leu Xaa Ser His Leu Ser Ser Arg Thr Gln Val Gly Lys Ser  
50 55 60

Leu Ser Gly His Xaa Pro Leu Gly Gly Val Gly Leu Ser Val Pro Phe  
65 70 75 80

Leu Ala Val Thr Ser Xaa Cys Ala Arg Val Glu  
85 90

&lt;210&gt; 5978

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (107)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (117)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (127)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (129)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (135)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids



## 5251

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (140)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (151)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (152)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (213)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (216)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5978

Ala	Leu	Val	Ser	Val	Leu	Thr	Lys	Glu	Tyr	Glu	Asp	Ala	Val	Ser	Ile
1				5					10					15	

Ala	Thr	Ala	Val	Leu	Val	Val	Val	Thr	Val	Ala	Phe	Ile	Gln	Glu	Tyr
			20					25					30		

Arg	Ser	Glu	Lys	Ser	Leu	Glu	Glu	Leu	Thr	Lys	Leu	Val	Pro	Pro	Glu
		35					40					45			

Cys	Asn	Cys	Leu	Arg	Glu	Gly	Lys	Leu	Gln	His	Leu	Leu	Ala	Arg	Glu
	50					55					60				

Leu	Val	Pro	Gly	Asp	Val	Val	Ser	Leu	Ser	Ile	Gly	Asp	Arg	Ile	Pro
65					70					75				80	

Ala	Asp	Ile	Arg	Leu	Thr	Glu	Val	Thr	Asp	Leu	Leu	Val	Asp	Glu	Ser
			85						90					95	

Ser	Phe	Thr	Gly	Glu	Ala	Glu	Pro	Cys	Ser	Xaa	Thr	Asp	Ser	Pro	Leu
			100					105					110		

Thr	Gly	Gly	Gly	Xaa	Leu	Thr	Thr	Leu	Ser	Asn	Ile	Val	Phe	Xaa	Gly
		115					120					125			

Xaa	Leu	Val	Gln	Tyr	Gly	Xaa	Gly	Gln	Gly	Val	Xaa	Ile	Gly	Thr	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5252

130	135	140
Glu Ser Ser Gln Phe Gly Xaa Xaa Phe Lys Met Met Gln Ala Glu Glu		
145	150	155 160
Thr Pro Lys Thr Pro Leu Gln Lys Ser Met Asp Arg Leu Gly Lys Gln		
	165	170 175
Leu Thr Leu Phe Ser Phe Gly Ile Ile Gly Leu Ile Met Leu Ile Gly		
	180	185 190
Trp Ser Gln Gly Lys Gln Leu Leu Ser Met Phe Thr Ile Gly Val Ser		
	195	200 205
Leu Ala Val Ala Xaa Ile Ser Xaa Gly Ser Ala His Ser Ser Ser Trp		
	210	215 220

&lt;210&gt; 5979

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5979

Pro Cys Cys Ile Trp Lys Ala Lys Trp Gly His Glu Glu Gly Trp Lys
1 5 10 15
Gly Gln Gly Val Met Ala Ala Tyr Leu Val Ser Pro Thr Pro Pro Val
20 25 30
Leu Gly Glu Pro Ser Cys Tyr Thr Gly Ser Ser Pro Arg Ser Ser Phe
35 40 45
Leu Ser Pro Thr Ser Trp Trp Arg Leu Gln Gly Arg Pro Glu Ser Trp
50 55 60
Thr Glu Arg Val Thr Gly Gly Val Gly Asp Lys His Gln Thr Ser Ile
65 70 75 80
Val Cys Pro Asp Leu Gly Val Ile Gly Gly Met Gly Trp Glu Arg Val
85 90 95
Ser Trp Tyr Ser His Gly Leu Ile Phe Phe Val Ser Ile Pro Phe Ile
100 105 110
Ser Leu Cys Leu Asn Arg Gly Gly Gly Val Val Thr Gly Asn Lys Asp
115 120 125

## 5253

Leu Arg Ser Ser Ala Pro Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 130 135 140

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys  
 145 150 155

<210> 5980

<211> 90

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5980

Ile Arg His Glu Gly Thr Leu Pro Leu Gln Arg Val Arg Ala Leu Leu  
 1 5 10 15

His Pro Gln Arg Ser Xaa Ala Lys His Leu Arg Gly His Ala Ser Val  
 20 25 30

Arg Pro Cys Arg Cys Asn Glu Cys Xaa Lys Ser Phe Ser Arg Arg Asp  
 35 40 45

His Leu Val Arg His Gln Arg Thr His Thr Gly Glu Lys Pro Phe Thr  
 50 55 60

Cys Pro Thr Cys Gly Lys Ser Phe Ser Arg Gly Tyr His Leu Ile Arg  
 65 70 75 80

His Gln Arg Thr His Ser Glu Lys Thr Ser  
 85 90

<210> 5981

<211> 54

<212> PRT

<213> Homo sapiens

<220>

## 5254

&lt;221&gt; SITE

&lt;222&gt; (41)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5981

Phe	Ser	Ser	Pro	Gly	Val	Val	Gly	Arg	Cys	Lys	Leu	Lys	Gly	Thr	Leu
1				5				10					15		

Gly	Gly	Gly	Gly	Arg	Gly	Glu	Asp	Asp	Ser	Asp	Pro	Ser	Pro	Val	Gly
			20				25						30		

Val	Arg	Ile	Thr	Gln	Glu	Leu	Arg	Xaa	Arg	Glu	Glu	Gly	Xaa	Arg	Arg
		35					40					45			

Leu	Gln	Leu	Leu	Gln	Gly
		50			

&lt;210&gt; 5982

&lt;211&gt; 96

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5982

Gly	Arg	Gln	Pro	Ala	Pro	Leu	Val	Pro	Pro	Cys	Ser	Ser	Ser	His	Tyr
1				5				10					15		

His	Arg	Pro	His	Thr	Leu	Thr	Arg	Thr	Leu	Thr	His	Arg	Ser	Leu	Gln
			20				25						30		

Arg	Met	Arg	Trp	Gly	Tyr	Asp	Arg	Ser	Leu	Arg	Leu	Val	Ser	Xaa	Ser
		35				40						45			

Leu	Leu	Gln	Pro	Pro	Pro	Gly	Phe	Gln	Pro	Ile	Leu	Phe	Ala	Ala	Gly
		50				55					60				

Val	Pro	Thr	Leu	Pro	Tyr	Ser	Gln	Leu	Leu	Phe	Pro	Ala	Asp	Gly	Glu
	65				70					75				80	

Met	Asp	Ser	Ala	Ala	Tyr	Pro	Pro	Thr	Pro	Leu	Gln	Gly	Val	Glu	Asp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5255

85

90

95

&lt;210&gt; 5983

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5983

Glu Lys Thr Gln Val Cys Asp Ile Ser Val Ile Pro Lys Asn Ile Leu  
 1 5 10 15

Gly Phe Leu Phe Val Phe Leu Phe Phe Gly Phe Phe Phe Phe Thr Ala  
 20 25 30

Glu Asn Trp Trp Tyr Phe His Ile His Ser Val Ser Ile Gln Phe Gln  
 35 40 45

Tyr Pro His Leu Met Arg Lys Lys Cys Phe Thr Asn Glu Gly Gly Ile  
 50 55 60

Leu Lys Leu Ala Val Met Leu Gly Trp Arg Lys Phe Gly Ile  
 65 70 75

&lt;210&gt; 5984

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5984

Lys Ile Thr Met Trp Met Ala Val Ser His Ile Thr Asp Val Glu Ser  
 1 5 10 15

Ile Ile Leu Tyr Leu Tyr Phe Gln Ile Asn Lys Phe Val Lys Gly Phe  
 20 25 30

His Pro Leu Leu Trp Ser Arg Lys Met Leu Glu Ile Tyr Ile Xaa Ile  
 35 40 45

Asp Thr Tyr Ile Cys Ile Tyr Ile Lys Lys Ile Leu Thr Thr Lys Val

## 5256

50                                      55                                      60  
 Pro Glu Pro Pro Ser Lys Val Leu Tyr Tyr Cys Ile Leu Tyr Ile Met  
 65                                      70                                      75                                      80  
 Tyr His Pro Met Trp Asn Leu  
                                     85

&lt;210&gt; 5985

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5985

Asp Lys Ser Ile Lys Asn Lys Ala Glu Arg Glu Arg Arg Val Arg Glu  
 1                                      5                                      10                                      15  
 Leu Asn Ser Ser Asn Thr Lys Lys Phe Leu Glu Glu Arg Lys Arg Leu  
                                     20                                      25                                      30  
 Ala Met Lys Gln Ser Lys Glu Met Asp Gln Leu Lys Lys Val Gln Leu  
                                     35                                      40                                      45  
 Glu His Leu Glu Phe Leu Glu Lys Gln Asn Glu Gln Leu Leu Lys Ser  
                                     50                                      55                                      60  
 Cys His Ala Val Ser Gln Thr Gln Gly Glu Gly Asp Ala Ala Asp Gly  
 65                                      70                                      75                                      80  
 Glu Ile Gly Ser Arg Asp Gly Pro Gln Thr Ser Asn Ser Ser Met Lys  
                                     85                                      90                                      95  
 Leu Gln Asn Ala Asn  
                                     100

&lt;210&gt; 5986

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (96)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5986

Lys Ser Ser Arg Gly Asn Thr Gln Ala Thr Ser His Ser Phe Asp Val

## 5257

1	5	10	15
Arg Val Leu Thr Gln Leu Leu Leu Asn Ser Asp His Arg Ser Thr Ala	20	25	30
Thr Val Gln Ile Cys Ser Gly Ser Val Asn Leu Lys Gly Ala Val Lys	35	40	45
Cys Arg Ala Tyr Ile His Ser Ser Lys Pro Lys Val Lys Asp Ala Val	50	55	60
Gln Ala Val Lys Arg Asp Ile Leu Asn Thr Val Ala Asp Arg Cys Glu	65	70	75
Met Leu Phe Glu Asp Leu Leu Leu Asn Glu Ile Pro Glu Lys Lys Xaa	85	90	95
Ser Glu Lys Glu Phe His Val Leu Pro Tyr Arg Val Phe Val Pro Leu	100	105	110
Pro Gly Ser Thr Val Met Leu Cys Asp Tyr Lys Phe Asp Asp Glu Ser	115	120	125
Ala Glu Glu Ile Arg Asp His Phe Met Glu Met Leu Asp His Thr Ile	130	135	140
Gln Ile Glu Asp Leu Glu Ile Ala Glu Glu Thr Asn Thr Ala Cys Met	145	150	155
Ser Ser Ser Met Asn Ser Gln Ala Ser Leu Asp Asn Thr Asp Asp Glu	165	170	175
Gln Pro Lys Gln Pro Ile Lys Thr Thr Met Leu Leu Lys Ile Gln Gln	180	185	190
Asn Ile Gly Val Ile Ala Ala Phe Thr Val Ala Val Leu Ala Ala Gly	195	200	205
Ile Ser Phe His Tyr Phe Ser Asp	210	215	

&lt;210&gt; 5987

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5987

Pro Phe Leu Val Ser Val Phe Pro Gly Glu Asn Glu Ala Lys Gln Glu	1	5	10	15
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5258

Phe Gly Phe Leu Leu Met Ser Ser Tyr Thr Ile His Ser Val Asn Phe  
                   20                                  25                                  30  
 Glu Lys Ile Tyr Pro Pro Phe Ser Leu Leu Gly Asp Ile Asn Tyr Ser  
                   35                                  40                                  45  
 Gln Glu Glu Tyr Asn Glu Leu Tyr Ser Tyr Phe Asp Leu Leu Lys Arg  
                   50                                  55                                  60  
 Cys Tyr Gln  
                   65

&lt;210&gt; 5988

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (74)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (93)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (94)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (96)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5988

Pro Ala Glu Leu Lys Cys Ala Val Thr Ser Gln Cys Glu Phe Leu Pro  
           1                                  5                                  10                                  15  
 Asn Ser Arg Ala Tyr His Leu Lys Lys Glu Arg Thr Glu Glu Gln Thr  
                   20                                  25                                  30  
 Lys Val Leu Arg Asn Glu Thr His Leu Phe Ser Leu Lys Ala Leu Arg  
                   35                                  40                                  45  
 Gly Gly Arg Arg Pro Ala Gln Ala Gly Gly Gly Phe Gly Gln Ser Glu



## 5259

50                                      55                                      60  
 Asp Pro Ala Arg Thr Leu Val Arg Trp Xaa Ala Ala His Leu Leu Arg  
 65                                      70                                      75                                      80  
 Ile Leu Leu Glu Ser Cys Ser Pro Arg Gly Leu Leu Xaa Xaa Trp Xaa  
                                     85                                      90                                      95  
 Lys Glu Ala Ala Trp Cys Gly Val Thr Gln Ile Ser Ile Pro Ile Cys  
                                     100                                      105                                      110  
 Cys Thr Phe Thr Leu Gln Gly Thr Cys Phe Lys Thr Asp Pro Gln Gln  
                                     115                                      120                                      125  
 Val Leu Glu Lys Cys Ile Gln Ser Glu Asp Val Cys Val Ser Val Tyr  
                                     130                                      135                                      140  
 Ile Gln Ser Ser Val Thr His Ala Pro Gln Ile Ala Ala Lys Ile Pro  
 145                                      150                                      155                                      160  
 Arg His

&lt;210&gt; 5989

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (80)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (86)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5989

Asn Cys Ala Phe Ser Gly Leu Leu Ser Ser Ile Pro Ser Phe Ser Leu  
 1                                      5                                      10                                      15

Leu Ser Ser Phe Gln His Val Thr Val Lys Ala Phe Ser Leu Ile Phe  
                                     20                                      25                                      30

Tyr His Cys Glu Tyr Val Pro Phe Glu Asn Pro Phe Ala Val Ile Phe  
                                     35                                      40                                      45

Val Gly Phe Gly Glu Glu Ala Val Val Asn Ala Cys Ile Ile Leu Ser

## 5260

50                                      55                                      60  
 Ser Lys Cys Ser Met Leu Ala Leu Leu Ile Ser Gly Asp Val Arg Xaa  
 65                                      70                                      75                                      80  
 Gln Leu Leu Ser Leu Xaa Lys  
                                     85

&lt;210&gt; 5990

&lt;211&gt; 71

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5990

Arg Pro Ala Glu Asp Val Leu Gln Val Arg Glu Thr Gly Pro Gly Asn  
 1                                      5                                      10                                      15

Pro Ala Val Thr Glu Asp Tyr Ile Glu Phe Glu Asn Val Gly Ile Phe  
                                     20                                      25                                      30

Glu Asn Ala Pro Pro Lys Lys Leu Leu Met Ser Ser Gly Asn Val Arg  
                                     35                                      40                                      45

Arg Leu Ile Tyr Thr Asp Thr Ala Glu Glu Lys Gly Arg Arg Ile Lys  
 50                                      55                                      60

Asp Pro Val Leu Leu Pro Gly  
 65                                      70

&lt;210&gt; 5991

&lt;211&gt; 217

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (51)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (104)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (120)

## 5261

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (137)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5991

Gly	Tyr	Trp	Thr	Phe	Asp	Met	Glu	Cys	Tyr	Lys	Lys	Tyr	Arg	Lys	Val
1				5					10					15	
Trp	Gly	Ile	Tyr	Asp	Cys	Gln	Gln	Pro	Met	Leu	Ala	Ile	Thr	Asp	Pro
			20					25					30		
Asp	Met	Ile	Lys	Thr	Val	Leu	Val	Lys	Glu	Cys	Tyr	Ser	Val	Phe	Thr
	35						40					45			
Asn	Arg	Xaa	Pro	Phe	Gly	Pro	Val	Gly	Phe	Met	Lys	Asn	Ala	Ile	Ser
	50					55					60				
Ile	Ala	Glu	Asp	Glu	Glu	Trp	Lys	Arg	Ile	Arg	Ser	Leu	Leu	Ser	Pro
65					70					75					80
Thr	Phe	Thr	Ser	Gly	Lys	Leu	Lys	Glu	Met	Phe	Pro	Ile	Ile	Ala	Gln
				85					90					95	
Tyr	Gly	Asp	Val	Leu	Val	Arg	Xaa	Leu	Arg	Arg	Glu	Ala	Glu	Lys	Gly
			100					105					110		
Lys	Pro	Val	Thr	Leu	Lys	Asp	Xaa	Phe	Gly	Ala	Tyr	Ser	Met	Asp	Val
		115					120					125			
Ile	Thr	Xaa	Thr	Ser	Phe	Gly	Val	Xaa	Ile	Asp	Ser	Leu	Asn	Asn	Pro
	130					135					140				
Gln	Asp	Pro	Phe	Val	Glu	Ser	Thr	Lys	Lys	Phe	Leu	Lys	Phe	Gly	Phe
145					150					155					160
Leu	Asp	Pro	Leu	Phe	Leu	Ser	Ile	Ile	Leu	Phe	Pro	Phe	Leu	Thr	Pro
				165					170					175	
Val	Phe	Glu	Ala	Leu	Asn	Val	Ser	Leu	Phe	Pro	Lys	Asp	Thr	Ile	Asn
			180					185					190		
Phe	Leu	Ser	Lys	Ser	Val	Asn	Arg	Met	Lys	Lys	Ser	Arg	Leu	Asn	Asp
		195					200					205			

5262

Lys Gln Lys Val Lys Ser Asp Gly Gly  
 210 215

&lt;210&gt; 5992

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (29)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5992

Val Pro Pro Ala Cys Cys Ala Ser Arg Val Ala Arg Leu Gly Phe Ser  
 1 5 10 15

Arg Cys Thr Cys Pro Arg Trp Pro Gly Pro Xaa Ala Xaa Arg Ala Ala  
 20 25 30

Ala Gly Ala Leu Pro Arg Gly Gln Val Arg Ile Trp Pro Arg Ser His  
 35 40 45

Pro Ser Ser Thr Ala Arg Thr Pro His Ser Leu Pro Gln Ser Ile Cys  
 50 55 60

Leu Ser Pro Met Gly Lys Leu Ile Asn Phe Ala Leu Asp  
 65 70 75

&lt;210&gt; 5993

&lt;211&gt; 68

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5993

Lys Met Leu Asn Arg Phe His Asp Cys Leu Leu Glu Asp Phe Lys Val  
 1 5 10 15

His Cys Gly Ser Ser Arg Arg Asn Pro Val Asn His Ser Ser His Leu  
 20 25 30

## 5263

Pro Thr Gly Leu Phe Ser Asn Gly Ala Ser Cys Glu Ala Ser Gly Phe  
                   35                  40                  45

Phe Cys Cys Cys Tyr Leu Phe Phe Phe Phe Asn Ala Leu Glu Asn Thr  
           50                  55                  60

Ala Leu Gly Tyr  
       65

<210> 5994

<211> 128

<212> PRT

<213> Homo sapiens

<400> 5994

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Leu Leu Ser Pro Ala  
       1                  5                  10                  15

Leu Pro Cys Thr Val His Ser Ser Ser Thr Met Ala Ser Arg Thr Pro  
                   20                  25                  30

Arg Asn Cys Ala Val Leu Lys Gly Glu Val Asp Leu Thr Ala Leu Ala  
           35                  40                  45

Lys Glu Leu Arg Ala Val Glu Asp Val Arg Pro Pro His Lys Val Thr  
       50                  55                  60

Asp Tyr Ser Ser Ser Ser Glu Glu Ser Gly Thr Thr Asp Glu Glu Asp  
       65                  70                  75                  80

Asp Asp Val Glu Gln Glu Gly Ala Asp Glu Ser Thr Ser Gly Pro Glu  
                   85                  90                  95

Asp Thr Arg Ala Ala Ser Ser Leu Asn Leu Ser Asn Gly Glu Thr Glu  
           100                  105                  110

Ser Val Lys Thr Met Ile Val His Asp Asp Val Glu Ser Glu Pro Ala  
           115                  120                  125

<210> 5995

<211> 52

<212> PRT

<213> Homo sapiens

## 5264

&lt;400&gt; 5995

His Ser Leu Lys Tyr Ile Tyr Leu Ile Thr Phe Tyr Asn Lys Glu Leu  
 1 5 10 15

Leu Ser Pro Asn Val Ile Ser Ala His Phe Glu Ile Pro Cys Tyr Arg  
 20 25 30

Trp Ser Leu Gln Thr Arg Lys Tyr Ser Ser Tyr Tyr Val Tyr Thr Leu  
 35 40 45

Val Leu Val Leu  
 50

&lt;210&gt; 5996

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5996

Ile Ser Pro Gly Gln Ser Gly Met Leu Thr Gly Thr Asn Val Arg Asn  
 1 5 10 15

Cys Ile Val His Cys Thr Cys Cys Pro Val Pro Gln Ala Cys Gln Cys  
 20 25 30

Leu Glu Ile Leu Phe Gly Leu Leu Lys Pro Leu Phe Ile Glu Asn Phe  
 35 40 45

Cys Pro Tyr Arg Ser Val Cys Met Gly Leu Gly Lys Ser Thr Cys Val  
 50 55 60

Tyr Leu Ser Ser Glu Ala Gln Ile His Ser Asn  
 65 70 75

&lt;210&gt; 5997

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 5997

Pro Asp Leu Phe Ala His Arg Glu Val Pro Leu Ser Leu His Gly Leu  
 1 5 10 15

Ser Asp Leu Ile Pro Pro His Ser Gln Phe Gln Val Val Glu Gln Asp  
 20 25 30

Glu Ala Ala Pro Ser Pro Leu Pro His Pro Asp Ser Ala Ala Glu Phe

## 5265

	35		40		45
Ile	Pro	Gln	Glu	Arg	Gly
	50			Ser	Thr
				Asp	Ser
				Val	His
				Ala	Cys
				Gly	
					60

&lt;210&gt; 5998

&lt;211&gt; 226

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (1)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (125)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (170)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (216)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (218)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5998

Xaa	Ser	Ala	Ser	Leu	Xaa	Glu	Gln	Lys	Leu	Glu	Leu	His	Arg	Gly	Gly
1				5				10						15	

Gly	Arg	Ser	Arg	Thr	Ser	Gly	Ser	Pro	Gly	Leu	Gln	Glu	Phe	Gly	Thr
			20					25					30		

Arg	Ser	Gly	Gly	Pro	Arg	Leu	Pro	Gln	Ala	Gln	Lys	Thr	Ala	Ala	Leu
			35				40					45			

## 5266

Pro Arg Thr Arg Gly Ala Gly Leu Leu Glu Ser Glu Leu Arg Asp Gly  
           50                          55                          60  
 Ser Gly Lys Lys Val Ala Val Ala Asp Val Gln Phe Gly Pro Met Arg  
       65                          70                          75                          80  
 Phe His Gln Asp Gln Leu Gln Val Leu Leu Val Phe Thr Lys Glu Asp  
                           85                          90                          95  
 Asn Gln Cys Asn Gly Phe Cys Arg Ala Cys Glu Lys Ala Gly Phe Lys  
                           100                          105                          110  
 Cys Thr Val Thr Lys Glu Ala Gln Ala Val Leu Ala Xaa Phe Leu Asp  
           115                          120                          125  
 Lys His His Asp Ile Ile Ile Ile Asp His Arg Asn Pro Arg Gln Leu  
       130                          135                          140  
 Asp Ala Glu Ala Leu Cys Arg Ser Ile Arg Ser Ser Lys Leu Ser Glu  
       145                          150                          155                          160  
 Asn Thr Val Ile Val Gly Val Val Arg Xaa Val Asp Arg Glu Glu Leu  
                           165                          170                          175  
 Ser Val Met Pro Phe Ile Ser Ala Gly Phe Thr Arg Arg Tyr Val Glu  
           180                          185                          190  
 Asn Pro Asn Ile Met Ala Cys Tyr Asn Glu Leu Leu Gln Leu Glu Phe  
           195                          200                          205  
 Gly Glu Gly Ala Ile Thr Thr Xaa Thr Xaa Gly Leu Leu Leu Lys Tyr  
       210                          215                          220  
 Ser Leu  
 225

&lt;210&gt; 5999

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (2)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 5999

Gly Xaa Val Gly Pro Ser Leu Val Ser Arg Ile Glu Asn Ile Gln Asn



## 5267

1                      5                      10                      15  
 Asp Ile Ser Leu Val Ser Phe Glu Gly Asn Asn Gln Arg Trp Ser Thr  
                     20                      25                      30  
 Gln Leu Leu Val Leu Leu Phe Thr Ile Ser His Leu Val Gln Ser Gly  
                     35                      40                      45  
 Ser Tyr Ile  
                     50

&lt;210&gt; 6000

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (35)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (37)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6000

Val Leu Asn Ser Met Leu Lys Ser Asn Trp Ile Trp Ser Arg Pro Thr  
 1                      5                      10                      15

Pro Arg Val Val Ser Gly Val Phe Phe Gln Xaa Leu Ser Gln Thr Thr  
                     20                      25                      30

Gln Val Xaa Leu Xaa Leu Xaa Ala Ala Leu Trp Xaa Gly Val Glu Gly

5268

35                      40                      45  
 Gly Gly Gln Gln Met His Cys Arg Val Ile Phe Leu Gly Met Val Phe  
     50                      55                      60  
 Lys Lys Pro Glu Ile Phe Thr Arg Thr Ser Lys Thr Arg Ser Gly Glu  
     65                      70                      75                      80  
 Leu Gly Arg

&lt;210&gt; 6001

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6001

Arg Cys Pro Ile Ala Ser Glu Val Pro Trp Thr Ile Thr Glu Ala Glu  
     1                      5                      10                      15  
 Leu Arg Val Thr Leu Thr Val Glu Gly Lys Ser Ile Pro Cys Leu Ile  
                     20                      25                      30  
 Asp Thr Gly Ala Thr His Ser Thr Leu Pro Ser Phe Gln Gly Pro Val  
                     35                      40                      45  
 Ser Leu Ala Pro Ile Thr Val Val Gly Ile Asp Gly Gln Ala Ser Lys  
                     50                      55                      60  
 Pro Leu Lys Thr Pro Pro Leu Trp Cys Gln Leu Gly Gln His Ser Phe  
     65                      70                      75                      80  
 Met His Ser Phe Leu Val Ile Pro Thr Cys Pro Leu Pro Leu Leu Gly  
                     85                      90                      95  
 Arg Asn Ile Leu Thr Lys Leu Ser Ala Ser Leu Thr Ile Pro Gly Val  
                     100                      105                      110  
 Gln Leu His Leu Ile Ala Ala Leu Leu Pro Asn Pro Lys Pro Pro Leu  
                     115                      120                      125  
 Cys Pro Leu Thr Ser Pro Gln Tyr His Pro Leu Pro Gln Asp Leu Pro  
                     130                      135                      140  
 Ser Ala  
 145

5269

&lt;210&gt; 6002

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6002

Ile	Pro	Tyr	Ser	Ala	Tyr	Ile	Lys	Ser	Lys	Met	Trp	Gly	Arg	Ser	Leu
1				5					10					15	

Leu	Leu	Pro	Gly	Gly	Asp	Gly	Ser	Pro	Leu	Thr	Leu	Leu	Gly	Glu	Gly
			20					25					30		

Gly	Ser	Cys	Trp	Pro	Val	Gly	Met	Lys	Val	Leu	Ala	Pro	His	Leu	Val
		35					40					45			

Phe	Pro	Asp	Thr	Thr	Ala	Val	Gly	Cys	Trp	Gly	Ala	Pro	Leu	Gln	Pro
	50					55					60				

Phe	Glu	Cys	Gly	Ile	Leu	Gly	Ser	Pro	Leu	Asp	Leu	Pro	Trp	Cys	Gly
65					70					75					80

Gln	Arg	Phe	Phe	Leu	Trp	Cys	Leu	Leu	Gly	Val	Glu	Gln	Leu	Ser	Ser
				85					90					95	

Lys	Ser	Phe	Leu	Ser	Cys	Trp	Asp	Val	Leu	Phe	Trp	Ser	Phe	Ser	
			100					105					110		

&lt;210&gt; 6003

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (64)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6003

Arg	Trp	Ala	Leu	Asp	Leu	Leu	Ile	Leu	Val	Lys	Trp	Val	Trp	Asp	Leu
1				5					10					15	

Leu	Thr	Phe	Val	Leu	Arg	Arg	Asp	Arg	Pro	Gly	Lys	Glu	Leu	Gly	Glu
			20					25					30		

Val	Ser	Ser	Lys	Glu	Arg	Gly	Val	Gly	Thr	Arg	Met	Glu	Glu	Ser	Gly
			35				40					45			

Leu	Gln	Ile	Ala	Phe	Thr	Ser	Pro	Phe	Phe	Leu	Glu	Ser	Leu	Ser	Xaa
	50					55					60				

5270

Arg  
65

<210> 6004

<211> 427

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (301)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6004

Ala Ala Cys Cys Phe Ser Cys Trp Ala Ser Ser Gly Phe Ala Phe Val  
1 5 10 15

Ala Ser Glu Pro Leu Ala Phe Lys Pro Leu Ser Leu Leu Leu Pro His  
20 25 30

Thr Pro Leu Ser Leu Thr Pro Leu Phe Cys Cys Pro Val Thr Cys Pro  
35 40 45

Lys Leu Cys Pro Glu Leu Arg Thr Phe Pro Phe Leu Ser Leu Glu Pro  
50 55 60

Phe Phe Asp Ser Thr Lys Pro Ser Trp Tyr Pro Gly Met Thr Arg Leu  
65 70 75 80

Leu Asp Ala Glu Trp Trp Arg Arg Ser Glu Ala Gly His Leu Arg Arg  
85 90 95

Gln Val Ala Ala Val Leu Phe Phe Pro Glu Gly Thr Cys Ser Asn Lys  
100 105 110

Lys Ala Leu Leu Lys Phe Lys Pro Gly Ala Phe Ile Ala Gly Val Pro  
115 120 125

Val Gln Pro Val Leu Ile Arg Tyr Pro Asn Ser Leu Asp Thr Thr Ser  
130 135 140

Trp Ala Trp Arg Gly Pro Gly Val Leu Lys Val Leu Trp Leu Thr Ala  
145 150 155 160

Ser Gln Pro Cys Ser Ile Val Asp Val Glu Phe Leu Pro Val Tyr His  
165 170 175

Pro Ser Pro Glu Glu Ser Arg Asp Pro Thr Leu Tyr Ala Asn Asn Val

180					185					190					
Gln	Arg	Val	Met	Ala	Gln	Ala	Leu	Gly	Ile	Pro	Ala	Thr	Glu	Cys	Glu
		195					200					205			
Phe	Val	Gly	Ser	Leu	Pro	Val	Ile	Val	Val	Gly	Arg	Leu	Lys	Val	Ala
		210					215					220			
Leu	Glu	Pro	Gln	Leu	Trp	Glu	Leu	Gly	Lys	Val	Leu	Arg	Lys	Ala	Gly
							230					235			240
Leu	Ser	Ala	Gly	Tyr	Val	Asp	Ala	Gly	Ala	Glu	Pro	Gly	Arg	Ser	Arg
				245					250					255	
Met	Ile	Ser	Gln	Glu	Glu	Phe	Ala	Arg	Gln	Leu	Gln	Leu	Ser	Asp	Pro
				260					265					270	
Gln	Thr	Val	Ala	Gly	Ala	Phe	Gly	Tyr	Phe	Gln	Gln	Asp	Thr	Lys	Gly
				275					280					285	
Leu	Val	Asp	Phe	Arg	Asp	Val	Ala	Leu	Ala	Leu	Ala	Xaa	Leu	Asp	Gly
							295					300			
Gly	Arg	Ser	Leu	Glu	Glu	Leu	Thr	Arg	Leu	Ala	Phe	Glu	Leu	Phe	Ala
												315			320
Glu	Glu	Gln	Ala	Glu	Gly	Pro	Asn	Arg	Leu	Leu	Tyr	Lys	Asp	Gly	Phe
														335	
Ser	Thr	Ile	Leu	His	Leu	Leu	Leu	Gly	Ser	Pro	His	Pro	Ala	Ala	Thr
				340					345					350	
Ala	Leu	His	Ala	Glu	Leu	Cys	Gln	Ala	Gly	Ser	Ser	Gln	Gly	Leu	Ser
				355					360					365	
Leu	Cys	Gln	Phe	Gln	Asn	Phe	Ser	Leu	His	Asp	Pro	Leu	Tyr	Gly	Lys
														380	
Leu	Phe	Ser	Thr	Tyr	Leu	Arg	Pro	Pro	His	Thr	Ser	Arg	Gly	Thr	Ser
															400
Gln	Thr	Pro	Asn	Ala	Ser	Ser	Pro	Gly	Asn	Pro	Thr	Ala	Leu	Ala	Asn
				405					410						415
Gly	Thr	Val	Gln	Ala	Pro	Lys	Gln	Lys	Gly	Asp					
				420					425						

<211> 68

## 5272

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6005

```

Ile Tyr Thr Asn Arg Lys Leu Gly Thr Asn Leu Leu Cys Leu Trp Leu
 1             5             10             15

Leu Tyr Asn Tyr Gln Gly Lys Gly Asn Leu Pro Ile Lys Tyr Lys Val
          20             25             30

Val Lys Phe Lys Ile Thr Ile Ile Asn Asn Val Leu Leu Leu Gln Asn
          35             40             45

Glu Met Leu Gly Leu Ile Ile Glu Gly Ser Ser Thr Val Glu Ile Glu
 50             55             60

Leu Asn Gly Ser
65

```

&lt;210&gt; 6006

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (15)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (17)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6006

```

Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Val Lys Leu Xaa Phe
 1             5             10             15

Xaa Tyr Gln Tyr Met His Val Leu Cys Met Ser Ser Thr Cys Val Asp
          20             25             30

Thr Pro Val Asp Val Lys Leu Leu Tyr Asn Ile Asn Ser Met Cys Phe
          35             40             45

Tyr Ile Ser Leu Cys Lys Phe Asn Ile Thr Tyr Ala Val Ile Asn His
 50             55             60

Leu Phe Tyr Cys Cys
65

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5273

&lt;210&gt; 6007

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (72)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (74)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (83)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (85)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (90)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6007

Gln	Met	Glu	Gly	Tyr	Phe	Ser	Val	Leu	Ala	Phe	Gln	Leu	Tyr	Val	Gly
1				5				10					15		

Lys	Leu	Pro	Val	Leu	Leu	Gln	Val	Gln	Ser	Thr	Leu	Asp	Asp	Leu	Ser
			20					25					30		

Ile	Asn	Tyr	Ser	Gly	Cys	Asn	Ser	Pro	Lys	Xaa	Ser	Ser	Tyr	Ile	Phe
		35					40					45			

Trp	Leu	Ile	Pro	Pro	His	Leu	Ser	Ile	Gln	Ser	Asp	Gly	Lys	Arg	Gly
	50					55					60				

## 5274

Arg Trp Ile Leu Met Ser Cys Xaa Leu Xaa Pro Tyr Phe Gln Val Leu  
 65 70 75 80

Trp Trp Xaa Arg Xaa Asn Ile Cys Gln Xaa Ser Gly Phe Leu Ala Arg  
 85 90 95

Cys

<210> 6008

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6008

Ile Ile Leu Tyr Gln Gly Gln Arg Asp Phe Cys Arg Thr Ser Pro Leu  
 1 5 10 15

Glu Glu Leu Ser Leu Gly Arg Asn Thr Arg Ile Asn Ile Ser Thr Tyr  
 20 25 30

Ser Ser Pro Lys Asn Phe Pro Pro His Tyr Ser His Leu Pro Ile Asn  
 35 40 45

Asn Leu Leu Trp Val Asn Ile Gln His Ser Val Leu Val Gln Ser Ile  
 50 55 60

Cys Ser Ala Ile Thr Val Xaa Ser Thr Xaa  
 65 70

<210> 6009

<211> 47

<212> PRT

<213> Homo sapiens

<220>

<221> SITE



## 5275

&lt;222&gt; (20)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6009

Met	Pro	Gly	Ile	Val	Cys	Lys	Gly	Ile	Val	Asp	Asn	Lys	Val	Ile	Leu
1				5				10					15		

Met	Thr	Arg	Xaa	Lys	Ser	Phe	Leu	Leu	Ser	Leu	Ile	Arg	Pro	Leu	Val
			20				25					30			

Gly	Trp	Gly	Val	Gly	Arg	Arg	Val	Val	Leu	Thr	Glu	Ser	Phe	Lys
		35					40				45			

&lt;210&gt; 6010

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (70)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (84)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (115)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (146)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6010

Gly	Val	Tyr	Leu	Asn	Val	Leu	Pro	Ser	Pro	Phe	Pro	Ser	Arg	Leu	Cys
1				5			10					15			

Ser	Phe	Glu	Gly	Leu	Gly	Val	Cys	Ser	Arg	Pro	Cys	Cys	Leu	Ala	Gln
			20				25					30			

Asn	Met	Leu	Arg	Lys	Val	Leu	Arg	Thr	His	Phe	Phe	Pro	Ile	Lys	Pro
		35				40						45			

Ile	Ser	Phe	Pro	Asn	His	Lys	Gly	Val	Cys	Asp	Ser	Ser	Pro	Arg	Glu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5276

50		55		60
Thr Lys Glu Leu Gln Xaa Gly Val Trp Phe Ser Pro Val Gln Thr His				
65		70		75 80
Pro Glu Leu Xaa Arg Cys Leu Ser Asn Thr Leu Ser Leu Pro Lys Gln				
	85		90	95
Pro Val Gln Thr Phe Ser Leu Gly His Glu Ala Pro Arg Val Leu Pro				
	100		105	110
Val Pro Xaa Ser Asp Ala Tyr Leu Ser Ala Glu Pro Gln Asn Leu Cys				
	115		120	125
Ser Gly Asn Ala Val His Leu Leu Ser Val Gly Ser Glu His Ile Val				
	130		135	140
Leu Xaa Asp Thr Ser Phe				
145		150		

&lt;210&gt; 6011

&lt;211&gt; 79

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (61)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (66)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (77)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

5277

&lt;400&gt; 6011

Val Leu Arg Met Gln His Gly Ser Gly Phe Gly Ile Xaa Phe Asn Ala  
1 5 10 15  
Thr Asp Ala Leu Arg Cys Val Asn Asn Tyr Gln Gly Met Leu Lys Val  
20 25 30  
Ala Cys Ala Glu Glu Trp Gln Glu Ser Arg Thr Glu Gly Glu His Ser  
35 40 45  
Lys Glu Val Ile Lys Pro Tyr Asp Trp Thr Tyr Xaa Xaa Asp Tyr Lys  
50 55 60  
Gly Xaa Leu Leu Gly Glu Ser Leu Lys Leu Lys Val Xaa Ser Ile  
65 70 75

&lt;210&gt; 6012

&lt;211&gt; 81

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6012

Ile Phe Arg Ser Asp Phe Leu Leu His Phe Tyr Leu Thr Lys Glu Thr  
1 5 10 15  
Gly His Thr Pro Trp Phe Arg Asp Val Val Ile Ala Tyr Leu Pro Val  
20 25 30  
Phe Lys Lys Cys Phe Leu Gln Leu Leu Ser Thr Thr Val Leu Ser Leu  
35 40 45  
Met Asn Thr Val Val Ser His Pro Asn Ser Cys Thr Glu Ile Ile Ser  
50 55 60  
His Glu Ser Phe Ser Asn Ile Ser Asn Glu Ser Phe Ser Asn Leu Gly  
65 70 75 80

Ala

&lt;210&gt; 6013

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

## 5278

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (94)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (98)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (107)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6013

Gln	Leu	Pro	Val	Gln	Gly	His	Gly	Leu	Phe	Gly	Ala	Gln	Glu	Val	Leu
1				5				10					15		

Asn	His	Val	Leu	Arg	Asp	Ile	Glu	Leu	Phe	Met	Gly	Lys	Leu	Glu	Lys
		20					25						30		

Ala	Gln	Ala	Lys	Thr	Ser	Xaa	Lys	Lys	Lys	Phe	Gly	Lys	Lys	Asn	Lys
	35						40					45			

Asp	Gln	Gly	Gly	Leu	Thr	Gln	Ala	Gln	Tyr	Ile	Asp	Cys	Phe	Gln	Lys
	50					55					60				

Ile	Lys	His	Ser	Phe	Asn	Leu	Leu	Gly	Arg	Leu	Ala	Thr	Trp	Leu	Lys
65					70				75					80	

Glu	Thr	Ser	Ala	Pro	Glu	Leu	Val	His	Ile	Leu	Phe	Lys	Xaa	Leu	Asn
			85						90					95	

Phe	Xaa	Leu	Ala	Arg	Cys	Pro	Glu	Ala	Gly	Xaa	Ala	Ala	Gln	Val	Ile
		100					105						110		

&lt;210&gt; 6014

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

## 5279

<220>  
<221> SITE  
<222> (24)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (54)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (69)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (70)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (78)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (81)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (82)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (83)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (84)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>  
<221> SITE  
<222> (90)  
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

## 5280

&lt;221&gt; SITE

&lt;222&gt; (92)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (93)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (94)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6014

Leu	Glu	Glu	Asp	Ile	Ser	Lys	Lys	Met	Asp	Lys	Asp	Glu	Glu	Ala	Leu
1				5				10						15	

Lys	Ala	Ala	Gln	Ala	Glu	Leu	Xaa	Glu	Ala	Arg	Arg	Gln	Trp	His	His
			20					25					30		

Leu	Gln	Val	Glu	Ile	Glu	Ser	Leu	His	Ala	Val	Glu	Arg	Gly	Leu	Glu
		35					40					45			

Asn	Ser	Leu	His	Ala	Xaa	Glu	Gln	His	Tyr	Gln	Met	Gln	Leu	Gln	Asp
	50					55					60				

Leu	Glu	Thr	Val	Xaa	Xaa	Gly	Leu	Glu	Lys	Glu	Leu	Gln	Xaa	Val	Lys
65					70					75					80

Xaa	Xaa	Xaa	Xaa	Lys	Ala	Ala	Phe	Lys	Xaa	Thr	Xaa	Xaa	Xaa	Phe	
				85					90					95	

&lt;210&gt; 6015

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6015

Leu	Arg	Ala	His	Thr	Val	Arg	His	Glu	Glu	Lys	Val	Pro	Cys	His	Val
1				5				10						15	

Cys	Gly	Lys	Met	Leu	Ser	Pro	Ala	Asp	Pro	Phe	Asn	Phe			
			20					25							

&lt;210&gt; 6016

&lt;211&gt; 53

## 5281

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6016

Gln Gly Pro Thr Glu Val Lys Glu Gly Gly Trp Glu Cys Tyr Ser Leu  
 1 5 10 15

Glu Trp Arg Cys Asp Phe Ser Arg Trp Lys Val Val Phe Leu Lys Gly  
 20 25 30

Ile Gly Arg Ser Arg Phe Leu Leu Ile Gln Ile His Phe Pro Pro Thr  
 35 40 45

Glu Gly Arg Asn Tyr  
 50

&lt;210&gt; 6017

&lt;211&gt; 29

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6017

Pro Arg Val Val Phe His Leu Asn Leu His Pro Pro Pro Pro Gly Asp  
 1 5 10 15

Tyr Phe Glu Ile Asn Leu Arg His Gln Gly Gln Ala Gln  
 20 25

&lt;210&gt; 6018

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (33)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (71)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (72)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

5282

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6018

Ser Phe His Asn Thr Leu Ala Phe Pro Tyr Leu Tyr Gly Leu Tyr Leu  
1 5 10 15

Val Asn Leu Asn Lys Asn Leu Asp Phe Lys Lys Asn Trp Glu Arg Arg  
20 25 30

Xaa Val Ile Leu Leu Ala Phe Ser Ser Leu Asp Val Gly Ser His Asn  
35 40 45

Ser Asn Ile Glu Gly Lys Phe Cys Phe Cys Lys Ile Gly Leu Lys Leu  
50 55 60

Arg Ser Phe His Glu Arg Xaa Xaa Xaa Thr Cys Thr Ser Ala  
65 70 75

&lt;210&gt; 6019

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6019

Ser Ala Thr Cys Leu Phe Glu Val Leu Tyr Gln Ser Val Thr Arg Ala  
1 5 10 15

Phe Cys Val Cys Ala Ile Leu Cys Leu Ser Phe Lys Val Ala Pro Lys  
20 25 30

Val Ser His Leu Ala Phe Gln Gln Gly His Phe Leu Ser Phe Tyr Asn  
35 40 45

Met Gln Tyr Ile Cys Asn Asp Leu Ala Phe Phe  
50 55

&lt;210&gt; 6020

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6020

Arg Ser His Ile Leu Leu Leu Ser Gly Cys Phe Ser Ile Leu Cys Pro



## 5283

1                      5                      10                      15  
 Phe Pro Gln Gln Gln Val Gly Pro Arg Leu Cys Thr Ala Leu Arg Cys  
                          20                      25                      30  
 Arg Trp Tyr Arg Asp Asn Cys Leu Asn Ser Cys Ala Asp Phe Cys Asn  
                          35                      40                      45  
 Ser Ala Val Glu Thr Lys Val Leu Glu Ser Val Leu Ser Met  
                          50                      55                      60

&lt;210&gt; 6021

&lt;211&gt; 216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (39)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6021

Ser Gly Gly Ser Ser Val His Leu Ser Asp Pro Val Ala Pro Ser Ser  
 1                      5                      10                      15  
 Ala Gly Leu Tyr Phe Glu Pro Glu Pro Ile Ser Ser Thr Pro Asn Tyr  
                          20                      25                      30  
 Leu Gln Arg Gly Glu Phe Xaa Ser Cys Val Ser Cys Glu Glu Asn Ser  
                          35                      40                      45  
 Ser Cys Leu Asp Gln Ile Phe Asp Ser Tyr Leu Gln Thr Glu Met His  
                          50                      55                      60  
 Pro Glu Pro Leu Leu Asn Ser Thr Gln Ser Ala Pro His His Phe Pro  
 65                      70                      75                      80  
 Asp Ser Phe Gln Ala Thr Pro Phe Cys Phe Asn Gln Ser Leu Ile Pro  
                          85                      90                      95  
 Gly Ser Pro Ser Asn Ser Ser Ile Leu Ser Gly Ser Leu Asp Tyr Ser  
                          100                      105                      110  
 Tyr Ser Pro Val Gln Leu Pro Ser Tyr Ala Pro Glu Asn Tyr Asn Ser  
                          115                      120                      125  
 Pro Ala Ser Leu Asp Thr Arg Thr Cys Gly Tyr Pro Pro Glu Asp His  
                          130                      135                      140

## 5284

Ser Tyr Gln His Leu Ser Ser His Ala Gln Tyr Ser Cys Phe Ser Ser  
 145 150 155 160

Ala Thr Thr Ser Ile Cys Tyr Cys Ala Ser Cys Glu Ala Glu Asp Leu  
 165 170 175

Asp Ala Leu Gln Ala Ala Glu Tyr Phe Tyr Pro Ser Thr Asp Cys Val  
 180 185 190

Asp Phe Ala Pro Ser Ala Ala Ala Thr Ser Asp Phe Tyr Lys Arg Glu  
 195 200 205

Thr Asn Cys Asp Ile Cys Tyr Ser  
 210 215

<210> 6022

<211> 43

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6022

Ser Lys Arg Arg Asp Lys Lys Arg Gly Gly Val Gly Ser Arg Lys Gln  
 1 5 10 15

Ser Leu Asn Phe Ser Arg Thr Gln Leu Ser Leu Arg Xaa Asn Phe Leu  
 20 25 30

Leu Ser Leu Trp Asp Ala Ile Val Ile Phe Asn  
 35 40

<210> 6023

<211> 55

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

## 5285

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6023

Pro	Pro	Cys	Xaa	Leu	Arg	Cys	Val	Xaa	Glu	Thr	Gly	Ser	Asn	Thr	Thr
1				5					10					15	

His	Tyr	Arg	Glu	Ser	Trp	Tyr	Ala	Cys	Arg	Tyr	Arg	Ser	Gly	Ile	Pro
			20					25					30		

Gly	Ser	Thr	His	Ala	Ser	Glu	Ile	Ser	Trp	Pro	Tyr	Phe	Leu	Ser	Gly
			35					40				45			

Asn	Leu	Leu	Thr	Met	Met	Trp
	50					55

&lt;210&gt; 6024

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (34)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (58)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6024

Asp	Ala	Ile	Lys	Val	Lys	Glu	Tyr	Asn	Asn	Leu	Leu	Asn	Ala	Leu	Gln
1					5					10				15	

## 5286

Met Asp Ser Asp Glu Met Lys Lys Ile Leu Ala Glu Asn Ser Arg Lys  
                   20                                  25                                  30

Ile Xaa Val Leu Gln Val Asn Glu Lys Ser Xaa Ile Arg Gln Tyr Xaa  
                   35                                  40                                  45

Xaa Leu Val Glu Leu Glu Arg Gln Leu Xaa Lys Glu Asn Glu Lys Gln  
                   50                                  55                                  60

Lys Asn Glu Leu Leu Ser Met Glu Ala Glu Val Cys Glu Lys Ile Gly  
                   65                                  70                                  75                                  80

Cys Leu Gln

<210> 6025  
 <211> 64  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (3)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (49)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 6025  
 His Val Xaa Asp Val Ile Leu Glu Val Asn Gly Tyr Pro Val Gly Gly  
           1                                  5                                  10                                  15

Gln Asn Asp Leu Glu Arg Leu Gln Gln Leu Pro Glu Ala Glu Pro Pro  
                   20                                  25                                  30

Leu Cys Leu Lys Leu Ala Ala Arg Ser Leu Arg Gly Leu Glu Ala Trp  
                   35                                  40                                  45

Xaa Pro Pro Gly Ala Ala Glu Asp Trp Ala Leu Ala Ser Asp Leu Leu  
                   50                                  55                                  60

## 5287

<210> 6026  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (11)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (91)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (96)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (98)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 6026  
 Gly Ser Ser Ser Leu Ala Gly Trp Leu His Xaa Pro Trp Ala Pro Gln  
           1                  5                  10                  15  
 Ile Ile Lys Ser Thr Phe Ser Val Ser Gly Ile Cys Met Thr Ser Leu  
                   20                  25                  30  
 Glu Val Pro Cys Trp Val Val Ile Leu Val Ser Asp Gly Thr His Leu  
           35                  40                  45  
 Asn Leu Lys Tyr Phe Cys Gln Gly Ser Gly Gly Phe Met Ala Cys Ser  
           50                  55                  60  
 Ser Pro Ala Leu Leu Gly Arg Leu Gln Arg Cys His Leu Ala Leu Ser  
           65                  70                  75                  80  
 Pro Lys Asn Phe Glu Thr Gln Pro Gly Ala Xaa Arg Gly Leu Lys Xaa  
                   85                  90                  95  
 Ser Xaa Phe Pro Phe Lys Asn Tyr Gln Lys Ile Arg Pro  
           100                  105

<210> 6027  
 <211> 146

5288

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (100)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (110)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (144)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6027

Arg	Asp	Glu	Asn	Thr	Met	Lys	Asn	Ile	Phe	Ser	Lys	Lys	Arg	Lys	Leu
1				5					10					15	

Glu	Val	Ala	Cys	Ser	Asp	Cys	Glu	Val	Glu	Val	Leu	Pro	Leu	Gly	Leu
		20					25						30		

Glu	Thr	His	Pro	Arg	Thr	Ala	Lys	Thr	Glu	Lys	Cys	Pro	Pro	Lys	Phe
		35					40						45		

Ser	Asn	Asn	Pro	Lys	Glu	Leu	Thr	Met	Glu	Thr	Lys	Tyr	Asp	Asn	Ile
	50					55					60				

Ser	Arg	Ile	Gln	Tyr	His	Ser	Val	Ile	Arg	Asp	Pro	Glu	Ser	Lys	Thr
65					70					75					80

Ala	Ile	Phe	Gln	His	Asn	Gly	Lys	Lys	Met	Glu	Phe	Val	Ser	Ser	Glu
				85					90						95

Ser	Val	Thr	Xaa	Glu	Asp	Asn	Asp	Gly	Phe	Lys	Pro	Pro	Xaa	Glu	His
			100					105					110		

Leu	Asn	Ser	Lys	Thr	Lys	Gly	Ala	Gln	Lys	Asp	Ser	Ser	Ser	Asn	His
	115						120					125			

Val	Asp	Glu	Phe	Glu	Asp	Asn	Leu	Leu	Ile	Gly	Ile	Gln	Met	Trp	Xaa
	130						135								140

Arg	Tyr
145	

5289

&lt;210&gt; 6028

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (37)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (221)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6028

Lys	Ala	Pro	Ala	Ser	Thr	Cys	Pro	Arg	Arg	Pro	Thr	Gly	Ala	Ala	Cys
1				5					10					15	

Cys	Val	Asn	Trp	Arg	Ser	Pro	Lys	Gly	Pro	Gly	Arg	Pro	Pro	Gly	Ser
		20						25					30		

Ala	Pro	Pro	Thr	Xaa	Ala	Gln	Arg	His	Pro	Leu	Cys	Ser	Arg	Asn	Gln
		35					40					45			

Pro	Pro	Thr	Leu	Pro	Arg	Thr	Arg	Pro	Gln	Ser	Pro	Ala	Ala	Pro	Ser
	50					55					60				

Thr	Pro	Thr	Cys	Gln	Pro	Ala	Gly	Ser	Ser	Ala	Leu	Trp	Ser	Pro	Ser
65					70					75					80

Ser	Thr	Cys	Leu	Pro	Ala	Pro	Ala	Trp	Val	Pro	Val	Pro	Pro	Ser	Pro
				85					90					95	

Arg	Thr	Trp	Thr	Met	Arg	Ala	Val	Ile	Lys	Pro	Arg	Leu	Lys	Met	Lys
				100					105				110		

Met	Arg	Met	Ser	Ser	Arg	Met	Lys	Thr	Arg	Met	Arg	Thr	Arg	Met	Arg
		115					120					125			

Met	Glu	Ser	Arg	Ala	Ser	Gln	Ser	Leu	Glu	Arg	Arg	Pro	Arg	Ser	Ala
	130					135					140				

Thr	Pro	Trp	Thr	Trp	Ala	Thr	Val	Thr	His	His	Glu	Val	Pro	Thr	Ser
145					150					155					160

His	Ser	Ile	Pro	Cys	Ser	Val	Arg	Val	Ala	Ala	His	His	Thr	Ser	Pro
				165					170					175	

Cys	Gln	Glu	Gln	Glu	Ser	Pro	Gln	Ala	Glu	Cys	Pro	Arg	Gly	Ala	Leu
				180				185						190	

## 5290

Leu Arg Leu Ser Arg Glu Pro Val Lys Glu Ile Glu Ile Lys Pro Val  
 195 200 205

Leu Leu Gly His Arg Phe Ala Val Leu Lys Lys Lys Xaa Asn  
 210 215 220

<210> 6029

<211> 49

<212> PRT

<213> Homo sapiens

<400> 6029

Phe Val Glu Val Gly Met Ile Trp Gln Ser Leu Lys Phe Ile Leu Gly  
 1 5 10 15

Arg Arg Trp Gln Lys Ser Gly Val Tyr Gln Val Met Arg Phe Leu Leu  
 20 25 30

Thr His Gln Pro Asn Phe Cys Ser Phe Cys Thr Ser Glu Met Lys Lys  
 35 40 45

Arg

<210> 6030

<211> 73

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (45)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6030

Asp Thr Glu Ala Asp Val Leu Gly Leu Val Ala Ser Gly Thr Pro Asp  
 1 5 10 15

Val Ala Arg Ala Met Thr His Thr Leu Leu Arg His Leu Ala Ala Arg  
 20 25 30

Pro Pro Thr Gln Ala Gln His Gln His Gln Cys Pro Xaa Cys Leu Leu  
 35 40 45

Pro Leu Pro Gly Val Leu Thr Gly Trp Gly Trp Val Trp Gln Lys Ala  
 50 55 60



## 5291

Glu Leu Ser Glu Ala Trp Gly Gln Glu  
65 70

<210> 6031

<211> 55

<212> PRT

<213> Homo sapiens

<400> 6031

Asn Asn Phe Tyr Ile Leu Tyr Phe Pro Thr Lys Gln Asn Arg Asp Gln  
1 5 10 15

Tyr Ser His Leu Leu Ser Asp His Phe Leu Pro Tyr Gln Gly His Asn  
20 25 30

Ser Phe Arg Glu Lys Tyr Phe Ser Gly Val Thr Lys Arg Ile Ala Lys  
35 40 45

Glu Glu Lys Ser Thr Gln Glu  
50 55

<210> 6032

<211> 147

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids

## 5292

&lt;400&gt; 6032

Val Phe Arg Glu His Arg Xaa Ser Val Ile Cys Leu Glu Leu Val Asn  
 1 5 10 15  
 Arg Leu Val Tyr Xaa Gly Ser Xaa Asp Arg Thr Val Lys Cys Trp Leu  
 20 25 30  
 Ala Asp Thr Gly Glu Cys Val Xaa Thr Phe Thr Ala His Arg Arg Asn  
 35 40 45  
 Val Ser Ala Leu Lys Tyr His Ala Gly Thr Leu Phe Thr Gly Ser Gly  
 50 55 60  
 Asp Ala Cys Ala Arg Ala Phe Asp Ala Gln Ser Gly Glu Leu Arg Arg  
 65 70 75 80  
 Val Phe Arg Gly His Thr Phe Ile Ile Asn Cys Ile Gln Val His Gly  
 85 90 95  
 Gln Val Leu Tyr Thr Ala Ser His Asp Gly Ala Leu Arg Leu Trp Asp  
 100 105 110  
 Val Arg Gly Leu Arg Gly Ala Pro Arg Ser Pro Pro Pro Met Arg Ser  
 115 120 125  
 Leu Ser Arg Leu Phe Ser Asn Lys Val Gly Cys Ala Val Ala Pro Leu  
 130 135 140  
 Gln Pro Ala  
 145

&lt;210&gt; 6033

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (34)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6033

Gly Asn Arg Ala Arg Leu His Leu Lys Lys Arg Lys Lys Asn Cys Asn  
 1 5 10 15  
 Ser Tyr Thr Leu Ala Leu Leu Leu Tyr His Cys Val Ile Leu Lys Thr  
 20 25 30  
 Thr Xaa Ile Tyr Tyr Thr Gly Thr Cys Leu Leu Ser Ile Ser Thr Thr

## 5293

35                      40                      45  
 Lys Met Glu Ala Pro Thr Ala Ile Arg Leu Ile Ser Leu Pro Gly Pro  
     50                      55                      60  
 Ile Leu Ile Met Leu Leu  
     65                      70  
  
 <210> 6034  
 <211> 162  
 <212> PRT  
 <213> Homo sapiens  
  
 <220>  
 <221> SITE  
 <222> (135)  
 <223> Xaa equals any of the naturally occurring L-amino acids  
  
 <400> 6034  
 Glu His Leu Glu Arg Met Leu Gly Gln Ala Gly Glu Arg Arg Ala Asp  
     1                      5                      10                      15  
 Val Tyr Val Gly Val Asp Val Phe Ala Arg Gly Asn Val Val Gly Gly  
                     20                      25                      30  
 Arg Phe Asp Thr Asp Lys Ser Leu Glu Leu Ile Arg Lys His Gly Phe  
                     35                      40                      45  
 Ser Val Ala Leu Phe Ala Pro Gly Trp Val Tyr Glu Cys Leu Glu Lys  
                     50                      55                      60  
 Lys Asp Phe Phe Gln Asn Gln Asp Lys Phe Trp Gly Arg Leu Glu Arg  
     65                      70                      75                      80  
 Tyr Leu Pro Thr His Ser Ile Cys Ser Leu Pro Phe Val Thr Ser Phe  
                     85                      90                      95  
 Cys Leu Gly Met Gly Ala Arg Arg Val Cys Tyr Gly Gln Glu Glu Ala  
                     100                      105                      110  
 Val Gly Pro Trp Tyr His Leu Ser Ala Gln Glu Ile Gln Pro Leu Phe  
                     115                      120                      125  
 Gly Glu His Arg Leu Gly Xaa Asp Gly Arg Gly Trp Val Arg Thr His  
                     130                      135                      140  
 Cys Cys Leu Glu Asp Ala Trp His Gly Gly Ser Ser Leu Leu Val Arg  
     145                      150                      155                      160

5294

Gly Val

&lt;210&gt; 6035

&lt;211&gt; 64

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (15)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (24)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (52)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (53)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6035

Lys	Tyr	Tyr	Thr	Cys	Glu	Thr	Asp	Xaa	Glu	Asn	Gln	Cys	Gly	Xaa	Gly
1				5				10					15		

Val	Val	His	Ile	Asn	Tyr	Leu	Xaa	Ser	Thr	Xaa	His	Lys	Ser	Gln	Ala
		20						25					30		

Cys	Lys	Ile	Ser	Gly	Leu	Ala	Pro	Glu	Arg	Gln	Ile	Pro	His	Asp	Leu
		35					40					45			

Thr	Asp	Met	Xaa	Xaa	Leu	Lys	Lys	Ser	Asn	Ser	Glu	Gln	Arg	Val	Glu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5295

50

55

60

&lt;210&gt; 6036

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (43)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (75)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6036

Gly	Val	Leu	His	Phe	Cys	Gly	Lys	Ser	Pro	Phe	Trp	Arg	Ser	Ser	Thr
1				5					10					15	

Gly	Arg	Phe	Leu	Gly	Cys	Tyr	Asn	Gln	Asp	Phe	Ser	Thr	Thr	Thr	Leu
			20					25					30		

Leu	Val	Phe	Gly	Ala	Arg	Val	Ile	Leu	Cys	Xaa	Trp	Gly	Gly	Gln	Phe
		35					40					45			

Ile	Val	Gly	Cys	Phe	Thr	Ala	Ser	Ile	Pro	Leu	Ser	Tyr	Ser	Leu	Gln
	50					55					60				

Gly	Lys	Thr	Thr	Lys	Asn	Val	Pro	Arg	His	Xaa	Gln	Ile	Ser	Pro	Gly
65					70					75					80

Gly	Gln	Ser	Phe	Ile
				85

&lt;210&gt; 6037

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6037

Leu	Ser	Leu	Arg	Asn	Ala	Lys	Tyr	Ser	Phe	Pro	Gln	Glu	Leu	Ile	Ser
1				5					10				15		

## 5296

Leu Phe Ser Met Thr Asp Leu Asn Asp Asn Ile Cys Lys Arg Tyr Ile  
                   20                  25                  30  
 Lys Met Ile Thr Asn Ile Val Ile Leu Ser Leu Ile Ile Cys Ile Ser  
                   35                  40                  45  
 Leu Ala Phe Trp Ile Ile Ser Met Thr Ala Ser Thr Tyr Tyr Gly Asn  
                   50                  55                  60  
 Leu Arg Pro Ile Ser Pro Trp Arg Trp Leu Phe Ser Val Val Val Pro  
                   65                  70                  75                  80  
 Val Leu Ile Val Ser Asn Gly Leu Lys Lys Lys Ser Leu Asp His Ser  
                   85                  90                  95  
 Gly Ala Leu Gly Gly Leu Val Val Gly Phe Ile Leu Thr Ile Ala Asn  
                   100                  105                  110  
 Phe Ser Phe Phe Thr Ser Leu Leu Met Phe Phe Leu Ser Ser Ser Lys  
                   115                  120                  125  
 Leu Thr Lys Trp Lys Gly Glu Val Lys Lys Arg Leu Asp Ser Glu Tyr  
                   130                  135                  140  
 Lys Glu Gly Gly Gln Arg Asn Trp Val Gln Val Phe Cys Asn Gly Ala  
                   145                  150                  155                  160  
 Val Pro Thr Glu Leu Ala Leu Leu Tyr Met Ile Glu Asn Gly Pro Gly  
                   165                  170                  175  
 Glu Ile Gln Ser Ile Phe Pro Ser Ser Thr Pro Leu Pro Gly Cys Val  
                   180                  185                  190  
 Cys Leu Ser Trp Leu His Trp Pro Ala Leu Leu Glu Thr His Gly Leu  
                   195                  200                  205  
 Gln Lys Leu Ala Gln Phe  
                   210

&lt;210&gt; 6038

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6038

Phe Phe Tyr Asn Thr Lys Val Thr Thr Trp Asn Phe Lys Asp Asn Val  
           1                  5                  10                  15

## 5297

Met Cys Val Cys Glu Ile Tyr Ile His Ile Tyr Ile Tyr Phe Leu Lys  
20 25 30

Glu Glu Lys Ile Pro Phe Cys Ser Thr Cys Ile Asn Ser Ser Phe Leu  
35 40 45

Ile Ala Val Lys Trp Gln Leu Leu Ile Asn Tyr Cys Asp Cys Phe Lys  
50 55 60

Ile  
65

<210> 6039

<211> 55

<212> PRT

<213> Homo sapiens

<400> 6039

Lys Ala Gly Phe Arg Gln Ser Val His Phe Tyr Ser Lys Ile Gly Val  
1 5 10 15

Ser Val Tyr Ile Tyr Leu Lys Leu Asn Arg Ser Asp Phe Tyr Phe Leu  
20 25 30

Gly Tyr Ser Arg Ser Ile Leu Lys Leu Leu Phe Lys Ile Leu Lys Pro  
35 40 45

His Phe Lys Ser Cys Arg Pro  
50 55

<210> 6040

<211> 54

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6040

Gln Leu Gln Ile Asn Arg Tyr Thr Pro Tyr Thr Ile Thr Asn Thr Phe

## 5298

1                      5                      10                      15  
 Tyr Thr Val His Ile Ser Val His Gln His Tyr Phe Ile Tyr Thr Leu  
                     20                      25                      30  
 Phe Xaa Xaa Ile Asn Ile Phe Leu Asn Trp Asp Tyr Cys Pro Tyr Ala  
                     35                      40                      45  
 Leu Tyr Phe Leu Phe Gln  
                     50

&lt;210&gt; 6041

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6041

Leu Leu Thr Thr Trp Val Lys Gly Lys Arg Gln Met Ala Ser Lys Pro  
 1                      5                      10                      15  
 Leu Val Cys Leu Ser Ser Ser Gly Ser Glu Glu Ile Thr Ser Ala Phe  
                     20                      25                      30  
 Leu Pro Glu Glu Phe Gly Val Phe Lys Gly Gly Trp Gly Gly Cys His  
                     35                      40                      45  
 Phe Glu Asn Met Leu Leu Phe Leu Leu Ile Val Leu Arg Leu Ile Trp  
                     50                      55                      60  
 Lys Gly Tyr Phe Phe Leu Ala Asn Thr Phe Trp Tyr Phe  
 65                      70                      75

&lt;210&gt; 6042

&lt;211&gt; 218

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (133)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (202)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids



## 5299

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (208)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (216)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6042

His	Ile	Glu	Met	Ala	Leu	Pro	Lys	Asp	Ala	Ile	Pro	Ser	Leu	Ser	Glu
1				5					10				15		

Cys	Gln	Cys	Gly	Ile	Cys	Met	Glu	Ile	Leu	Val	Glu	Pro	Val	Thr	Leu
			20					25					30		

Pro	Cys	Asn	His	Thr	Leu	Cys	Lys	Pro	Cys	Phe	Gln	Ser	Thr	Val	Glu
		35					40					45			

Lys	Ala	Ser	Leu	Cys	Cys	Pro	Phe	Cys	Arg	Arg	Arg	Val	Ser	Ser	Trp
	50					55					60				

Thr	Arg	Tyr	His	Thr	Arg	Arg	Asn	Ser	Leu	Val	Asn	Val	Glu	Leu	Trp
65					70					75					80

Thr	Ile	Ile	Gln	Lys	His	Tyr	Pro	Arg	Glu	Cys	Lys	Leu	Arg	Ala	Ser
				85					90					95	

Gly	Gln	Glu	Ser	Glu	Glu	Val	Ala	Asp	Asp	Tyr	Gln	Pro	Val	Arg	Leu
			100					105					110		

Leu	Ser	Lys	Pro	Gly	Glu	Leu	Arg	Arg	Glu	Tyr	Glu	Glu	Glu	Ile	Ser
		115					120				125				

Lys	Val	Ala	Ala	Xaa	Arg	Arg	Ala	Ser	Glu	Glu	Glu	Glu	Asn	Lys	Ala
	130					135					140				

Ser	Glu	Glu	Tyr	Ile	Gln	Arg	Leu	Leu	Ala	Glu	Glu	Glu	Glu	Glu	Glu
145					150					155					160

Lys	Arg	Gln	Ala	Glu	Lys	Arg	Arg	Arg	Ala	Met	Glu	Glu	Gln	Leu	Lys
			165						170					175	

Ser	Asp	Glu	Glu	Leu	Ala	Arg	Lys	Leu	Ser	Ile	Asp	Ile	Asn	Asn	Phe
		180						185					190		

Cys	Glu	Gly	Ser	Ile	Ser	Ala	Ser	Pro	Xaa	Glu	Phe	Gln	Lys	Asn	Xaa
		195					200					205			

Val	Pro	Val	Thr	Pro	Lys	Ser	Xaa	Lys	Arg
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 5300

210

215

&lt;210&gt; 6043

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (4)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6043

Trp	Pro	Gly	Xaa	Trp	Thr	Leu	Ala	Thr	Glu	Leu	Leu	His	Arg	Ala	Trp
1				5					10					15	

Cys	Pro	Gln	Ala	Ser	Arg	Leu	Gly	Leu	Glu	Pro	Gly	Met	Ser	Pro	Gly
		20					25						30		

Ser	Ala	Leu	Ala	Leu	Leu	Trp	Ser	Leu	Pro	Ala	Ser	Asp	Leu	Gly	Arg
	35					40						45			

Ser	Val	Ile	Ala	Gly	Leu	Trp	Pro	His	Thr	Gly	Val	Leu	Ile	His	Leu
	50					55					60				

Glu	Thr	Ser	Gln	Ser	Phe	Leu	Gln	Gly	Gln	Leu	Thr	Lys	Ser	Ile	Phe
65					70					75					80

Pro	Leu	Cys	Cys	Thr	Ser	Leu	Phe	Cys	Val	Cys	Val	Val	Thr	Val	Gly
				85					90					95	

Gly	Gly	Arg	Val	Gly	Ser	Thr	Phe	Val	Ala
		100						105	

&lt;210&gt; 6044

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6044

Ile	Pro	Ala	Pro	Leu	Tyr	His	Leu	Phe	Leu	Pro	Leu	Lys	Gly	Lys	Thr
1				5					10					15	

Phe	His	Pro	Ser	Lys	Leu	Thr	Ala	Phe	Ser	Val	Gly	Phe	Ser	Tyr	Ala
		20						25					30		

Leu	His	Thr	Leu	Asp	Leu	Thr	Cys	Arg	Tyr	Ser	Ser	Pro	Leu	Ala	Arg
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

## 35

45

Met Ile Phe  
65

<210> 6045

<211> 78

<212> PRT

<213> Homo sapiens

**<220>**

&lt;221&gt; SITE

&lt;222&gt; (59)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (60)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

**<220>**

<221> SITE

&lt;222&gt; (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6045

His Val Val Tyr Pro Arg Lys Leu Gly Arg Pro Leu Pro Ser Gln Ala  
1 5 10 15

Leu Arg Asn Asn Phe Ser Cys Leu Pro Met Leu Ile Ile Leu Val Phe  
20 25 30

Asn Ser Leu Ser Asp Leu Gln Asn Val Phe Ile Asn Ser Ser Cys Thr  
35 40 45

Trp Leu Asp Lys Leu Ser Cys Leu Cys Trp Xaa Xaa Asn Asp Tyr Leu  
50 55 60

Leu Ile Tyr Phe Gly Xaa Asn Ile Xaa Lys Asn Ile Asn Lys  
65 70 75

5302

&lt;210&gt; 6046

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (102)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6046

Pro Tyr Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro  
 1 5 10 15

Gly Ser Thr His Ala Ser Gly Arg Leu Ala Gly Arg Gly Ala Glu Ser  
 20 25 30

Gly Leu Pro Arg Arg Gly Thr Ser Tyr Ser Val Gly Glu Ala Met Glu  
 35 40 45

Glu Leu Leu Pro Asp Gly Gln Ile Trp Ala Asn Met Asp Pro Glu Glu  
 50 55 60

Arg Met Leu Ala Ala Ala Thr Ala Phe Thr His Ile Cys Ala Gly Gln  
 65 70 75 80

Gly Glu Gly Asp Val Arg Arg Glu Ala Gln Ser Ile Gln Tyr Asp Pro  
 85 90 95

Tyr Ser Lys Ala Ser Xaa Ala Pro Gly Lys Arg Pro Ala Leu Pro Val  
 100 105 110

Gln Leu Gln Tyr Pro His Val Glu Ser Asn Val Pro Ser Glu Thr Val  
 115 120 125

Ser Glu Ala Ser Gln Arg Leu Arg Lys Pro Val Met Lys Arg Lys Val  
 130 135 140

Leu Arg Arg Lys Pro Asp Gly Glu Val Leu Val Thr Asp Glu Ser Ile  
 145 150 155 160

Ile Lys

&lt;210&gt; 6047

&lt;211&gt; 48

&lt;212&gt; PRT

## 5303

&lt;213&gt; Homo sapiens

&lt;400&gt; 6047

Val	Leu	Cys	Val	Cys	Val	Cys	Val	Cys	Val	Cys	Ala	His	Met	Cys	Thr
1				5					10					15	
Leu	Val	Leu	Val	Pro	Asn	Ser	Cys	Ser	Pro	Gly	Asp	Pro	Leu	Val	Leu
			20					25					30		
Glu	Arg	Pro	Pro	Pro	Arg	Trp	Ser	Thr	Ser	Phe	Val	Pro	Leu	Val	Arg
		35					40					45			

&lt;210&gt; 6048

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (27)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6048

Asn	Val	Lys	Lys	His	Ile	Tyr	Leu	Tyr	Ile	Asp	Phe	Lys	Gln	Asn	Thr
1				5					10					15	
Leu	Asn	Thr	Leu	Leu	Ser	Val	Arg	Leu	Met	Xaa	Ala	Glu	Glu	Phe	Tyr
			20					25					30		
Trp	Val	Glu	Lys	Thr	Val	Ile	Tyr	Ile	Val	Leu	Asn	Val	Phe	Ile	Ile
		35					40					45			
Asn	Gly	Cys	Ser	Ile	Ile	Ser	Ile	Leu	Phe	Ser	Ala	Ser	Asn	Gly	Met
	50					55				60					
Ile	Ile	Arg	His	Phe	Ser	Leu	Leu	Ile	Ser						
65					70										

&lt;210&gt; 6049

&lt;211&gt; 45

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6049

## 5304

Phe Ile Lys Trp Val Ile Ile His Thr Asn Ala Lys Leu Ser Ile Tyr  
 1 5 10 15

Tyr Ile Lys Ile Phe Asn Val Leu Ala Asn Phe Gly Lys Ala Lys Thr  
 20 25 30

Thr Ser Val Asn Lys Asp Gly Phe Leu Val Ile Cys His  
 35 40 45

<210> 6050

<211> 62

<212> PRT

<213> Homo sapiens

<400> 6050

Gly Glu Thr Ser Gly Leu Leu Cys Ser Gly Lys Thr Arg Asp Ala His  
 1 5 10 15

Tyr Cys Glu Gly Pro Leu Lys Ser Gly Leu Leu Asn Gly Phe Leu Leu  
 20 25 30

Ile Ser Trp Val His Ala Arg Met Met Gly Leu Asp Ala Val Gly Lys  
 35 40 45

Arg Arg Cys Lys Asn Asn Lys Gln Tyr Ile Pro Ser Lys Lys  
 50 55 60

<210> 6051

<211> 59

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6051

Gln Xaa Cys Lys Asn Ile Gln Lys Ser Arg Thr Ile Gly Leu Ser Phe  
 1 5 10 15

Gln Ser Lys Ser Lys Xaa Ser Cys Phe His Phe Thr Arg Leu Trp Lys

## 5305

20                                      25                                      30  
 Pro Met Asp Val Ile Val Lys Cys Ile Cys Ile Thr Leu Thr Phe Leu  
                  35                                      40                                      45  
 Lys Cys Phe Glu Leu Ile Lys Asn Ser Thr Met  
                  50                                      55

<210> 6052  
 <211> 51  
 <212> PRT  
 <213> Homo sapiens

<400> 6052  
 Asp Thr Phe Asn Pro Val Asn Phe Phe Ser Val Ser Asp Lys Val Lys  
          1                                      5                                      10                                      15  
 Phe Ser Ser Arg Val Gln Asn Thr Phe Ile Tyr Phe Phe Val Phe Leu  
                  20                                      25                                      30  
 Lys Val Gln Arg Thr Thr Leu Ile Asn Leu Ser Phe Pro Ala Thr Trp  
                  35                                      40                                      45  
 Asn Ser Thr  
                  50

<210> 6053  
 <211> 89  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (14)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 6053  
 Lys Leu Leu Ser Pro Leu Asn Gly Leu Gly Pro Leu Val Xaa Ser His  
          1                                      5                                      10                                      15  
 Cys Ser Ile Arg Val Ser Leu His Leu Trp Ala Leu Leu Ser Cys Asp  
                  20                                      25                                      30  
 Ser Arg Asn Val Leu Leu Ile His Phe Met Val Asp His Pro Leu Ala  
                  35                                      40                                      45  
 Leu Ser Thr Leu Pro Leu Phe Ser Ser Ala Pro His Arg Ile Ile Ser

## 5306

50 55 60  
Ile Val Ser Val Ser Ser Leu Leu Ile Leu Tyr Ser Ala Cys Ser Asp  
65 70 75 80  
Leu Pro Val Asn Pro Leu Val Asn Leu  
85

&lt;210&gt; 6054

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6054

Ile Ser Gly Asp Lys His Leu Lys Lys Val Gln Leu Thr Leu Glu Gln  
1 5 10 15  
His Glu Ser Glu Leu Cys Val Gly Leu Leu Thr Gly Arg Phe Phe Phe  
20 25 30  
Ser Ile Ser Ile Leu Glu Asn Phe Leu Glu Ile Phe Gly Asn Leu Lys  
35 40 45  
Lys Leu Ala Asn Tyr Ser Leu Glu Ile Ser Glu Val Lys Lys Lys Leu  
50 55 60  
Val Cys His Arg Cys Ile Lys Leu Thr Met Ser Ile Leu Val His Phe  
65 70 75 80  
Ile Ile Tyr Tyr His Lys Ile Tyr Thr Ser Phe Phe  
85 90

&lt;210&gt; 6055

&lt;211&gt; 48

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids



## 5307

<220>  
 <221> SITE  
 <222> (19)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (27)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (28)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (29)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 6055  
 Thr Glu Lys Glu Met Lys Ile Asp Gln Xaa Glu Lys Gly Leu Val Xaa  
     1                    5                    10                    15  
 Lys Gly Xaa Lys Gly Arg Ser Leu Trp Asn Xaa Xaa Xaa Leu Lys Asn  
                     20                    25                    30  
 Glu Val Thr Pro Asn Asn Arg Thr Gly Gln Ser Glu Met Thr Trp Leu  
             35                    40                    45

<210> 6056  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (5)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 6056  
 Lys Ser Ser Ile Xaa Pro Pro Leu Ile Phe Pro Ala Thr Asp Ile Asp  
     1                    5                    10                    15  
 Arg Ile Leu Arg Ala Gly Phe Thr Leu Gln Glu Ala Leu Gly Ala Leu  
             20                    25                    30

5308

His Arg Val Gly Gly Asn Ala Asp Leu Ala Leu Leu Val Leu Leu Ala  
                   35                                  40                                  45

Lys Asn Ile Val Val Pro Thr  
           50                                  55

&lt;210&gt; 6057

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6057

Ser Gln Leu Leu Gly Arg Leu Arg Gln Glu Asn His Leu Asn Pro Gly  
       1                                  5                                  10                                  15

Gly Arg Gly Cys Ser Glu Pro Arg Ser His His Cys Thr Pro Ala Trp  
                                   20                                  25                                  30

Ala Thr Arg Ala Lys Leu His Leu Lys Lys Thr His Ile Phe Met Asn  
                   35                                  40                                  45

Ile Ser His Gln Gln Cys Arg Lys  
       50                                  55

&lt;210&gt; 6058

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (98)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6058

Glu Glu Thr Trp Leu Leu Ala Leu Ile Asn Glu Glu Ser His Phe Pro  
       1                                  5                                  10                                  15

Gln Ala Thr Asp Ser Thr Leu Leu Glu Lys Leu His Ser Gln His Ala  
                   20                                  25                                  30

Asn Asn His Phe Tyr Val Lys Pro Arg Val Ala Val Asn Asn Phe Gly  
                   35                                  40                                  45

Val Lys His Tyr Ala Gly Glu Val Gln Tyr Asp Val Arg Gly Ile Leu  
       50                                  55                                  60

## 5309

Glu Lys Asn Arg Asp Thr Phe Arg Asp Asp Leu Leu Asn Leu Leu Arg  
 65 70 75 80

Glu Ser Arg Phe Asp Phe Ile Tyr Asp Leu Phe Glu His Val Ser Lys  
 85 90 95

Pro Xaa Gln Pro Gly Tyr Leu Glu Met Trp Glu Pro Thr Ser Ala Ala  
 100 105 110

Tyr

<210> 6059

<211> 44

<212> PRT

<213> Homo sapiens

<400> 6059

Ala Phe Ile Tyr Leu Asn Phe Glu Phe Leu Asn Phe Leu Val Lys Asn  
 1 5 10 15

Gln Asp Lys His Thr Ser Leu Gly Leu Cys Arg Val Arg Ile Lys Thr  
 20 25 30

Ser Leu Ala Gly Asp Arg Asn Phe Ser Thr Pro Leu  
 35 40

<210> 6060

<211> 59

<212> PRT

<213> Homo sapiens

<400> 6060

Ala Asp Tyr Pro Thr Val Gly Thr Lys Leu Asp Ser Tyr Phe Val Gly  
 1 5 10 15

Leu Ser Phe Leu Ile Leu Thr Ile Tyr His Pro Ile Leu Cys Pro Val  
 20 25 30

Ile Phe Phe Lys Ser Leu Phe Asn Val Leu Gln His Cys Asp Cys Met  
 35 40 45

Leu Ala Thr Leu Leu Leu Glu Cys Ser Phe Ser  
 50 55

## 5310

&lt;210&gt; 6061

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6061

Trp Val Asn Leu Arg Phe Gln Ser Gln Lys Leu Gln Val Val Val Thr  
1 5 10 15

Phe Leu Ser Ala Trp Ile Lys Pro Leu Lys Cys Gly Lys Cys Cys Gln  
20 25 30

Ser Arg Ala Ile Ser Leu Leu Ser Ser Met Arg Gly Ile Glu Thr Lys  
35 40 45

Gln Gln Phe  
50

&lt;210&gt; 6062

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (17)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (52)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6062

Lys Leu Thr Leu Thr Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val  
1 5 10 15

Xaa Thr Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala  
20 25 30

Arg Gly Gly Val Ser Ser Leu Lys Leu Arg Thr Ile Phe Xaa Val Ala  
35 40 45

## 5311

Lys Leu His Xaa Met Met Leu Pro Leu Leu Ser Val Leu Ser Gly Pro  
 50 55 60

Leu Phe Thr Ser Thr Arg Tyr Pro Ser  
 65 70

<210> 6063

<211> 59

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (55)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6063

Arg Gly Asn Arg Cys Leu Thr Lys Arg Glu Ala Ile Arg Gly Ile Asp  
 1 5 10 15

Glu Ala Gln Leu Lys Ser Ser Leu Ala Ser Ser Ser Leu Ala Ser Val  
 20 25 30

His Leu Lys Asn Lys Ser Trp Leu Thr Val Gly Ser Thr Arg Phe Glu  
 35 40 45

Ile Arg Trp Leu Tyr Phe Xaa Phe Phe Gly Ile  
 50 55

<210> 6064

<211> 66

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6064

Thr Xaa Met Phe Gln Gln His Arg Phe Ile Cys Asn His Lys Ser Asp  
 1 5 10 15

Thr Phe Arg Met Thr Lys Pro Gln Lys Asn Ala Ile Phe Lys Ala Glu  
 20 25 30

Thr Val Leu Phe Trp Ala Lys Trp Asn Pro Cys Phe Ser Asp Thr Val

## 5312

35 40 45  
 Arg Val Glu Ile Lys Asp Thr Glu Asn Leu Pro Leu Gly Asn His Asn  
 50 55 60

Tyr Leu  
 65

<210> 6065  
 <211> 46  
 <212> PRT  
 <213> Homo sapiens

<400> 6065  
 Lys Arg Gln Leu Glu Asn Val Met His Gly Val Phe Lys Lys Thr Lys  
 1 5 10 15

Cys Ser Phe Tyr Leu Thr Asp Asn Ser Phe Tyr Thr Leu Tyr Asn Lys  
 20 25 30

Ile Ser Thr Arg His Leu Val Gly Lys Val Lys Lys Lys Lys  
 35 40 45

<210> 6066  
 <211> 136  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (10)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (13)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (76)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 6066  
 Arg Gly Leu Pro Ser Ile Pro Glu Asn Xaa Asn Leu Xaa Glu Tyr Phe  
 1 5 10 15

## 5313

Val Ala Val Asp Val Asn Asn Met Leu His Leu Tyr Ala Ser Met Leu  
                   20                  25                  30  
 Tyr Glu Arg Arg Ile Leu Ile Ile Cys Ser Lys Leu Ser Thr Leu Thr  
                   35                  40                  45  
 Ala Cys Ile His Gly Ser Ala Ala Met Leu Tyr Pro Met Tyr Trp Gln  
                   50                  55                  60  
 His Val Tyr Ile Pro Val Leu Pro Pro His Leu Xaa Asp Tyr Cys Cys  
                   65                  70                  75                  80  
 Ala Pro Met Pro Tyr Leu Ile Gly Ile His Leu Ser Leu Met Glu Lys  
                                   85                  90                  95  
 Val Arg Asn Met Ala Leu Asp Asp Val Val Ile Leu Asn Val Asp Thr  
                   100                  105                  110  
 Asn Thr Leu Glu Thr Pro Phe Asp Asp Leu Gln Ser Leu Pro Asn Asp  
                   115                  120                  125  
 Val Glu Glu Ser Ile Val Ile Gln  
                   130                  135

&lt;210&gt; 6067

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (40)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6067

His Phe Ala Ala Tyr Gly Asn Val Cys Val Leu Phe Ile Leu Met Asn  
           1                  5                  10                  15  
 Cys Ala Met Thr His Lys Pro Lys Gln Cys Gln Leu Gln Leu Asn Leu  
                   20                  25                  30  
 Gly Arg Asn Pro Trp Cys Phe Xaa Phe Phe Phe Asp Ala Gly Glu Arg  
                   35                  40                  45  
 Leu His Phe Val Thr Asn Leu Leu Pro Asn Arg Lys Ile Tyr Phe Leu  
                   50                  55                  60  
 Ser Asp Arg His His Thr Arg Cys Leu Leu  
                   65                  70

5314

&lt;210&gt; 6068

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6068

Gly Lys Pro Gly Ala Pro Leu Gln Pro Trp Asp Asn Leu Arg Ile Pro  
 1 5 10 15

Pro Glu Ala Ser Ser Val Met Asp Ala Val Leu Arg Ile Thr Cys Cys  
 20 25 30

Pro Gly Val Thr Cys Phe His Leu Pro Ala His Gln Pro Ser Ala His  
 35 40 45

Leu Thr Cys Leu Pro Met Asp Trp Gly Leu Pro Gly Pro Pro Pro Tyr  
 50 55 60

Val Asn Leu His Phe Leu Phe Lys Asn Gln Glu Lys Lys Arg Phe Glu  
 65 70 75 80

Asp Pro Lys Ser Cys Gln  
 85

&lt;210&gt; 6069

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (50)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (76)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6069

Leu Glu Gly Arg Ala Leu Leu Gln Val Arg Val Gly Val Leu Ser Glu



## 5315

1                      5                      10                      15  
 Ser Cys Val Leu Gly Leu Val Ser Phe Pro Cys Pro Cys Ser Gly Ser  
                          20                           25                           30  
 Val Arg Gln Ile Gly Arg Leu Cys Ser Arg Pro Gln Glu Cys Xaa Ser  
                          35                           40                           45  
 Pro Xaa Leu Ala Gln Tyr Ile Gly Thr Cys Gly Phe Tyr Phe Val Phe  
                          50                           55                           60  
 Asp Val Pro Asp Arg Asn Arg Ala Arg Gly Thr Xaa Lys Thr Thr Val  
                          65                           70                           75                           80  
 Gly Ser

&lt;210&gt; 6070

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6070

Ser Lys Glu Arg Val Asp Gly Leu Lys Arg Leu Ala Ser Val Ser Val  
                          1                           5                           10                           15  
 Ala Gly Ser His Leu Ala Ser Asn Trp Lys Gln Asn Phe Trp Gly Val  
                          20                           25                           30  
 Leu Phe Cys Ile Arg Val Cys Phe Met Leu Ser Lys Thr Tyr Phe Arg  
                          35                           40                           45  
 Ser Lys  
                          50

&lt;210&gt; 6071

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (15)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6071

Trp Lys Leu Val Gly Pro Pro Gly Leu Thr Gly Ile Arg Thr Xaa Gly

## 5316

1	5	10	15
Lys Asn Phe Val Arg Pro Gln Lys His Cys Thr Val Asn Ile Leu Glu			
20	25	30	
Lys Val Cys Gln Thr Gly Ile Asn Asp Ser Met Ile Phe Asn Asp Cys			
35	40	45	
Lys Leu Arg			
50			

<210> 6072  
 <211> 52  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (29)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (47)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (52)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 6072
Lys Ser Met Gly Glu Glu Asn Val Lys Met Leu Ser Asp Ile Arg Cys
1 5 10 15
Met Lys Ser His Asn Ile Lys Ala Ile Ser Tyr Phe Xaa Arg Gly Ile
20 25 30
Phe Leu Leu Pro Leu Leu Val Leu Asp Arg Phe Tyr Lys Met Xaa Asn
35 40 45
Lys Ile Trp Xaa
50

<210> 6073  
 <211> 102  
 <212> PRT

## 5317

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (50)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (58)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6073

Glu	Ser	Ser	Ile	Cys	Cys	Ser	Phe	Leu	Gln	Leu	Tyr	Phe	Cys	Ser	Ile
1				5					10					15	

Ser	Trp	Phe	His	Ser	Leu	Leu	Phe	Trp	Asp	Phe	Val	Phe	Arg	Ser	Ala
			20					25					30		

Tyr	Phe	Leu	Tyr	Ile	Cys	Met	Gln	Met	Lys	Glu	Gly	Ser	Leu	Tyr	Trp
		35					40					45			

Cys	Xaa	Phe	Ser	Leu	Gln	Leu	Leu	Val	Xaa	Gly	Asp	Leu	Leu	Glu	Lys
	50					55					60				

Ile	Leu	Pro	Leu	Lys	Gly	Glu	Asn	Arg	Pro	Leu	Cys	Val	Tyr	Leu	Tyr
65					70					75				80	

Arg	Asp	Val	Tyr	Met	Gly	Cys	Gly	Gly	Thr	Leu	Leu	Asn	Val	Asn	Leu
				85					90					95	

Pro	Cys	Gln	Trp	Lys	Asp
				100	

&lt;210&gt; 6074

&lt;211&gt; 37

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6074

Leu	Phe	Gly	Ala	Val	Arg	Lys	Lys	Lys	Lys	Lys	Lys	Ile	Ala	Ile	Ser
1				5					10					15	

Ser	Cys	Val	His	Asn	Ser	Arg	Tyr	Asn	Ile	Gln	Ser	Leu	Glu	Gly	Pro
			20					25					30		

Phe	Trp	Ala	Leu	Asp
			35	

## 5318

&lt;210&gt; 6075

&lt;211&gt; 37

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6075

Tyr Ser Phe Asp Asn Thr Arg Val Ser Glu Ile Pro Asp Thr Ser Val  
1 5 10 15

Gln Asn Ala Met Asp Leu Leu Phe Tyr Ser Cys Gln Pro Phe Ser Ile  
20 25 30

Pro Ile Gln Lys Arg  
35

&lt;210&gt; 6076

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6076

Thr Leu Ser Asp Val Gly Cys Pro His Gln Asn Ile Cys Thr Ser Cys  
1 5 10 15

Phe Cys Pro Thr Leu Glu Ala Ala Glu Lys Lys Gly Lys Gln Gly Ser  
20 25 30

Arg Asn Leu Cys Tyr Val Phe Ser Pro Leu Tyr Leu Phe Leu Trp Xaa  
35 40 45

Val Val Gln Glu Ile Leu Phe Ser Cys Ser Lys Leu Ile Lys Arg Ser  
50 55 60

Asn Ile Arg Asn Tyr Asp Asn Ser Leu  
65 70

&lt;210&gt; 6077

&lt;211&gt; 49

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

5319

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6077

Tyr	Arg	Gly	Arg	Glu	Ile	Ser	Lys	Val	Phe	Thr	Ser	Ser	Leu	Lys	Gly
1				5				10					15		

Val	Gly	Ser	Asn	Ser	Ser	Ser	Pro	Cys	Tyr	Phe	Gly	Val	Ser	His	Tyr
			20					25					30		

Ser	Leu	Thr	His	Gln	Lys	Ile	His	Ser	Phe	Lys	Cys	Leu	Xaa	Val	Leu
		35					40					45			

Ser

&lt;210&gt; 6078

&lt;211&gt; 38

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (16)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (25)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (26)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (30)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

## 5320

&lt;400&gt; 6078

Pro Asn Ala Asp Gln Lys Tyr Ser Thr Asp Lys Met Xaa Glu Pro Xaa  
 1 5 10 15

Val Tyr Val Lys Ser Leu Tyr Thr Xaa Xaa Gly Pro Asp Xaa Tyr Phe  
 20 25 30

Leu Leu Leu Ile Gly Gly  
 35

&lt;210&gt; 6079

&lt;211&gt; 303

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (14)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (118)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (147)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6079

Ala Phe Ser Ser Ser Glu Asp Asn Lys Xaa Gly Lys Arg Xaa Arg Thr  
 1 5 10 15

Asn Ser Arg Ser Thr Pro Thr Thr Pro Gln Gly Lys Pro Glu Thr Thr  
 20 25 30

Phe Leu Asp Gln Gly Cys Ser Ser Pro Val Leu Ile Asp Cys Pro His  
 35 40 45

Pro Asn Cys Asn Lys Lys Tyr Lys His Ile Asn Gly Leu Arg Tyr His  
 50 55 60

Gln Ala His Ala His Leu Asp Pro Glu Asn Lys Leu Glu Phe Glu Pro

## 5321

65		70		75		80
Asp Ser Glu Asp Lys Ile Ser Asp Cys Glu Glu Gly Leu Ser Asn Val						
	85			90		95
Ala Leu Glu Cys Ser Glu Pro Ser Thr Ser Val Ser Ala Tyr Asp Gln						
	100		105			110
Leu Lys Ala Pro Ala Xaa Pro Gly Ala Gly Asn Pro Pro Gly Thr Pro						
	115		120			125
Lys Gly Lys Arg Glu Leu Met Ser Asn Gly Pro Gly Ser Ile Ile Gly						
	130		135			140
Ala Lys Xaa Gly Lys Asn Ser Gly Lys Lys Lys Gly Leu Asn Asn Glu						
	145		150			155
Leu Asn Asn Leu Pro Val Ile Ser Asn Met Thr Ala Ala Leu Asp Ser						
		165		170		175
Cys Ser Ala Ala Asp Gly Ser Leu Ala Ala Glu Met Pro Lys Leu Glu						
		180		185		190
Ala Glu Gly Leu Ile Asp Lys Lys Asn Leu Gly Asp Lys Glu Lys Gly						
		195		200		205
Lys Lys Ala Asn Asn Cys Lys Thr Asp Lys Asn Leu Ser Lys Leu Lys						
		210		215		220
Ser Ala Arg Pro Ile Ala Pro Ala Pro Ala Pro Thr Pro Pro Gln Leu						
		225		230		235
Ile Ala Ile Pro Thr Ala Thr Phe Thr Thr Thr Thr Thr Gly Thr Ile						
			245		250	255
Pro Gly Leu Pro Ser Leu Thr Thr Thr Val Val Gln Ala Thr Pro Lys						
		260		265		270
Ser Pro Pro Leu Lys Pro Ile Gln Pro Lys Pro Thr Ile Met Gly Glu						
		275		280		285
Pro Ile Thr Val Asn Pro Ala Leu Val Ser Leu Lys Asp Lys Lys						
		290		295		300

&lt;210&gt; 6080

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

5322

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6080

Arg	Leu	Ser	Gln	His	Pro	Tyr	His	Thr	Val	Gln	Lys	Ser	Glu	Leu	Gln
1				5					10					15	

Arg	Leu	Cys	Ser	Val	Ser	Trp	Ser	Thr	Ser	Lys	Phe	Val	Val	Arg	Lys
			20					25					30		

Val	Arg	Cys	Arg	Asn	Leu	Arg	Leu	Gln	Arg	Leu	Cys	Ser	Val	Ser	Trp
		35					40					45			

Xaa	Thr	Ser	Thr	Phe	Phe	Val	Val	Asn	Ile	Gln	Ser	His
	50						55				60	

&lt;210&gt; 6081

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6081

Pro	Asn	Pro	Ala	Leu	Thr	Ala	Pro	Gln	Arg	Ile	Pro	Val	Ala	Ala	Gln
1				5					10					15	

Pro	Pro	Ala	Pro	Pro	Ser	Pro	Glu	Leu	Arg	Arg	Glu	Pro	Gln	Gly	Gly
			20					25					30		

Ala	Met	Arg	Thr	Gly	Val	Trp	Trp	Ser	Thr	Tyr	Gly	Ser	Trp	Pro	Ala
		35					40					45			

Ser	Gly	Ala	Val	Ala	Gly	Arg	Pro	Leu	Ala	Phe	Ser	Asp	Ala	Gly	Pro
	50					55					60				

His	Val	His	Tyr	Gly	Trp	Gly	Asp	Pro	Ile	Arg	Leu	Arg
65					70					75		

&lt;210&gt; 6082

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (22)



## 5323

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6082

Thr Ala Gly Pro Ser His Pro Trp Ile Ser Ser Cys Thr Thr Leu Lys  
1 5 10 15

Leu Glu Gln His Gln Xaa Leu Pro Arg Ser Pro Pro Ala Gln Pro Ser  
20 25 30

Xaa Gly Asn Val Ser Ser Ser Pro Gly Leu Gln Leu  
35 40

<210> 6083

<211> 52

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6083

Ala Glu Gly His Glu Arg Glu Arg Ser Xaa Glu Ser Gly Glu Glu Asp  
1 5 10 15

Ser Ser Leu Thr Asp Glu Pro Arg Arg Ala Cys Leu Ser His Pro Ser  
20 25 30

Leu Cys Gln Leu Leu Gly Gly Gln Xaa Pro Ala Leu Arg Asn Ser Pro  
35 40 45

Val Leu Gly Glu  
50

<210> 6084

<211> 78

5324

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6084

Leu Val Leu His Tyr Phe Pro Arg Glu Phe Leu Gln Val Asn Val His  
 1 5 10 15

Pro Phe Asp Leu Glu Ala Asp Ser Gln Phe Cys Leu Phe Gly Lys Ser  
 20 25 30

Ala Ser Glu Leu Asn Phe Leu Val Cys Lys Met Gly Leu Arg Lys Cys  
 35 40 45

Gly Leu Leu Phe Gln Arg Leu Leu Leu Gly Trp Asn Glu Ile Met Cys  
 50 55 60

Val Thr Lys Ala Leu Glu Thr Phe Trp Asn Leu Lys Ala Ile  
 65 70 75

&lt;210&gt; 6085

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (45)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (51)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6085

Ala Leu Ser Val Cys Asp Leu Leu Lys Asn Lys Phe Phe Val Lys Glu  
 1 5 10 15

Asn Thr Ser Leu Lys Asn Glu Lys Ala Ile Leu Ser Leu Ile Asn Leu  
 20 25 30

Ile Gln Asp Pro Ser Ile Ile Asn Leu Thr Val Leu Xaa Phe Thr Glu  
 35 40 45

Ile Ser Xaa Asn Gln Ser Gln Lys Ile Pro Pro Cys Thr Asn Leu Leu  
 50 55 60

Pro Leu His  
 65

5325

&lt;210&gt; 6086

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (31)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (48)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (55)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6086

Leu	Arg	Ile	Met	Thr	Pro	Leu	Val	Ser	Cys	Gly	Met	Gly	Arg	Ile	Phe
1				5					10				15		

Tyr	Phe	Phe	Cys	Thr	Phe	Thr	Trp	Arg	Leu	Phe	Leu	Leu	Arg	Xaa	Phe
			20				25						30		

Ile	Met	Gly	Phe	Lys	Ala	Leu	His	Leu	Pro	Asn	Xaa	Gly	Lys	Cys	Xaa
		35				40						45			

Lys	Tyr	Cys	Ile	Phe	Tyr	Xaa	Phe	Gly	Pro	Lys	Gly	Tyr
	50					55					60	

&lt;210&gt; 6087

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6087

Asn	Glu	Glu	Cys	Asn	Pro	Phe	Tyr	Lys	Met	Tyr	Thr	Leu	Cys	Tyr	Leu
1				5					10				15		

## 5326

Leu Leu Asn Phe Gly Leu Val Ile Pro Thr Asp Ala Lys Phe Phe Leu  
                   20                                  25                                  30

Gln Ser Thr Glu Ile Ile Gln Ile Phe Leu His Cys Gln Gln Asp Glu  
                   35                                  40                                  45

Ile Val  
           50

<210> 6088

<211> 141

<212> PRT

<213> Homo sapiens

<400> 6088

Trp Lys Lys Tyr Phe Lys Thr Phe Ile Asn Gly Lys Val Val Trp Gly  
       1                                  5                                  10                                  15

Ser Trp Phe Asp His Val Lys Gly Trp Trp Glu Met Lys Asp Arg His  
                   20                                  25                                  30

Gln Ile Leu Phe Leu Phe Tyr Glu Asp Ile Lys Arg Asp Pro Lys His  
                   35                                  40                                  45

Glu Ile Arg Lys Val Met Gln Phe Met Gly Lys Lys Val Asp Glu Thr  
           50                                  55                                  60

Val Leu Asp Lys Ile Val Gln Glu Thr Ser Phe Glu Lys Met Lys Glu  
       65                                  70                                  75                                  80

Asn Pro Met Thr Asn Arg Ser Thr Val Ser Lys Ser Ile Leu Asp Gln  
                                   85                                  90                                  95

Ser Ile Ser Ser Phe Met Arg Lys Gly Thr Val Gly Asp Trp Lys Asn  
                   100                                  105                                  110

His Phe Thr Val Ala Gln Asn Glu Arg Phe Asp Glu Ile Tyr Arg Arg  
           115                                  120                                  125

Lys Met Glu Gly Thr Ser Ile Asn Phe Cys Met Glu Leu  
       130                                  135                                  140

<210> 6089

<211> 65

<212> PRT

<213> Homo sapiens

5327

&lt;400&gt; 6089

Asn Lys His Leu Glu Ala Ile Phe Gly Leu Ile Lys Ile Val Leu Gly  
 1 5 10 15

Arg Ala Trp Trp Leu Thr Pro Ala Ile Pro Ala Leu Trp Glu Ala Glu  
 20 25 30

Asp Ser Gly Phe Leu Glu Leu Arg Ser Trp Glu Thr Ser Leu Gly Asn  
 35 40 45

Met Val Ile Pro Val Cys Leu Phe Lys Ile Lys Lys Ile Asn Glu Val  
 50 55 60

Met  
 65

&lt;210&gt; 6090

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (13)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6090

Val Ala Lys Gly Leu Leu Ser His Leu Cys Pro Pro Xaa Ile Leu Lys  
 1 5 10 15

Ala Arg Ser Leu Glu Phe Glu Leu Cys Pro His Met Pro Pro Arg His  
 20 25 30

Gln Gln Ser Lys Met Lys Ser Leu His Cys Leu Ser Val Asp Pro Thr  
 35 40 45

Leu Ser Pro His Trp Arg Gly Arg Gly Gly Gly Leu Arg Met Ser Ser  
 50 55 60

Ser Cys Pro Gly Cys Asn Met Val Lys Asp Glu Arg Lys Glu Met Leu  
 65 70 75 80

Gly Ala Ser Leu His  
 85

&lt;210&gt; 6091

5328

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6091

Gln Glu Pro Ser Ser Arg Val Ser Cys Phe Lys Ala Pro Tyr Pro Phe  
1 5 10 15  
Leu Arg Val Thr Asn Thr Cys Ala Arg Ser Leu Pro Phe Pro Ser Ser  
20 25 30  
Pro Cys Ile Trp Leu Ile Thr Gly Gln Leu Pro Ala Ser Leu Gln Phe  
35 40 45  
Gly Arg Trp Val Gly Asn Asp His His Ser Pro Arg Ser Pro Asp Gly  
50 55 60  
Leu Val Phe Arg Ala Leu His Arg His Leu Gln Gln Ala Pro Ala Arg  
65 70 75 80  
Pro Glu Val Ile Leu Arg Arg Asp Gly Ser  
85 90

&lt;210&gt; 6092

&lt;211&gt; 45

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6092

Leu Gln Leu Trp Ile Ala Tyr Phe Glu Lys Gly Glu Leu Gln Ile Leu  
1 5 10 15  
Pro Lys Asp Gly Glu Lys His Ile Lys Lys Ile Pro Thr Phe Arg Asn  
20 25 30  
Ser Phe Gln Gln Leu Leu Leu Glu Ile Phe Lys Leu Ile  
35 40 45

&lt;210&gt; 6093

&lt;211&gt; 49

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6093

Ile Ser Asp Lys Phe Pro Gly Asn Ala Asp Phe Thr Val Gln Gly Pro  
1 5 10 15

## 5329

His Phe Gly Asn His Thr Asn Arg Asn Leu Met Gln Thr Gln Gly Thr  
                   20                                  25                                  30

Tyr Gln Lys Ile Phe Asn Gln Val Ile Leu His Asp Lys Gly Gln Gln  
                   35                                  40                                  45

Cys

<210> 6094

<211> 58

<212> PRT

<213> Homo sapiens

<400> 6094

Thr Gly Phe His His Val Ser Gln Ala Ser Leu Glu Leu Leu Thr Ser  
       1                                  5                                  10                                  15

Gly Asp Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Ile  
                   20                                  25                                  30

Ser His Arg Ala Trp Pro Asn Asn Trp Asn Ile Phe Ile Met Lys Met  
                   35                                  40                                  45

Ser Ser Ala Leu Pro Lys Glu Thr Thr Asn  
           50                                  55

<210> 6095

<211> 89

<212> PRT

<213> Homo sapiens

<400> 6095

Cys Lys His Cys Ile Ser Tyr Val Glu Met Val Lys Asp Asp Tyr Glu  
       1                                  5                                  10                                  15

Asp Asp Ser His Val Phe Arg Lys Pro Ala Asn Asp Ile Thr Ser Gln  
                   20                                  25                                  30

Leu Glu Ile Asn Phe Gly Asn Leu Pro Arg Pro Gly Arg Gly Ala Arg  
                   35                                  40                                  45

Gly Gly Thr Arg Gly Gly Arg Gly Arg Ile Arg Arg Ala Glu Asn Tyr  
           50                                  55                                  60

Gly Pro Arg Ala Glu Val Val Met Gln Asp Val Ala Pro Asn Pro Asp  
       65                                  70                                  75                                  80

5330

Asp Pro Glu Asp Phe Pro Ala Leu Ser  
85

&lt;210&gt; 6096

&lt;211&gt; 32

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6096

Lys Leu Lys Met Leu Ala Glu His Phe Val Val Leu Gln Ala Leu Leu  
1 5 10 15

Ile Phe His Cys Ser Thr Cys Cys Trp Gln Ser Asn Phe Ser Glu Leu  
20 25 30

&lt;210&gt; 6097

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (64)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6097

Ala Glu His Cys Ser Pro Ile Leu Val Leu Ile Trp Lys Phe Leu Gly  
1 5 10 15

His Tyr Ala Asp Lys Lys Thr Arg Thr Pro Gly Ala Arg Lys Thr Cys  
20 25 30

Cys Lys Ser Leu Val Cys Ser Tyr Glu Cys Pro Ser Thr Leu Glu Glu  
35 40 45

Ala Leu Asp Ser Pro Val Pro Ser Phe Leu Gly Ala Arg Val Pro Xaa  
50 55 60

Cys  
65



/ 5331

<210> 6098  
 <211> 47  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (33)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 6098  
 Phe Tyr Cys Tyr Ser Glu Glu Ser Gln Leu Thr Asp Leu Asp Asp Phe  
 1 5 10 15  
 Lys Asp Ala Val Gln Met Arg Glu Gly Cys Lys Tyr Cys Phe Ser Ile  
 20 25 30  
 Xaa Glu Leu Thr Val Ala Lys Val Gly Tyr Ser Ile Glu Ser Leu  
 35 40 45

<210> 6099  
 <211> 165  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> SITE  
 <222> (149)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>  
 <221> SITE  
 <222> (153)  
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 6099  
 Ile Arg His Glu Glu Thr Ser Ile Ala Leu Gln Asp Asn Tyr Glu Ile  
 1 5 10 15  
 Arg Tyr Thr Ala Ile Ser Val Ile Lys Asn Leu Leu Ile Lys His Ala  
 20 25 30  
 Phe Asp Thr Arg Tyr Gln His Lys Asn Gln Gln Ala Lys Ile Ala Gln  
 35 40 45  
 Leu Tyr Leu Pro Phe Val Gly Leu Leu Leu Glu Asn Ile Gln Arg Leu  
 50 55 60  
 Ala Gly Arg Asp Thr Leu Tyr Ser Cys Ala Ala Met Pro Asn Ser Ala

## 5332

65		70		75		80									
Ser	Arg	Asp	Glu	Phe	Pro	Cys	Gly	Phe	Thr	Ser	Pro	Ala	Asn	Arg	Gly
				85					90					95	
Ser	Leu	Ser	Thr	Asp	Lys	Asp	Thr	Ala	Tyr	Gly	Ser	Phe	Gln	Asn	Gly
			100					105					110		
His	Gly	Ile	Lys	Arg	Glu	Asp	Ser	Arg	Gly	Ser	Leu	Phe	Pro	Glu	Gly
		115					120					125			
Ala	Thr	Gly	Phe	Pro	Asp	Gln	Gly	Asn	Thr	Gly	Glu	Asn	Thr	Arg	Gln
	130					135					140				
Asn	Ser	Thr	Arg	Xaa	Ile	Val	Ser	Xaa	Tyr	Asn	Arg	Leu	Asp	Gln	Tyr
145					150					155					160
Glu	Ile	Thr	Thr	Ser											
				165											

&lt;210&gt; 6100

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (44)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6100

Gln	Arg	Gly	Arg	Trp	Lys	Gln	Cys	Ser	Trp	Lys	Leu	Leu	Leu	Ser	Pro
1					5				10					15	

Leu	Ser	His	His	Ser	Arg	His	Leu	Leu	Gln	Ala	Gly	Arg	His	Val	Ser
		20					25						30		

Val	Arg	Phe	Leu	Pro	Gly	Asp	Ile	Arg	Ser	Pro	Xaa	Ile	Gln	Ile	Lys
		35					40					45			

Cys	Asn	Ile	Leu	Gln	Thr	Ala	Leu	Leu	Arg	Glu	Ile	Ser
	50					55					60	

&lt;210&gt; 6101

&lt;211&gt; 156

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

5333

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (92)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (110)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (146)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6101

Trp	Ile	Pro	Arg	Ala	Ser	Gly	Ile	Arg	His	Glu	His	Leu	Arg	Ser	His
1				5				10						15	

Thr	Gln	Glu	Lys	Val	Val	Ala	Cys	Pro	Thr	Cys	Gly	Gly	Met	Phe	Ala
			20					25					30		

Asn	Asn	Thr	Lys	Phe	Leu	Asp	His	Ile	Arg	Arg	Gln	Thr	Ser	Leu	Asp
		35					40					45			

Gln	Gln	His	Phe	Gln	Cys	Ser	His	Cys	Ser	Lys	Arg	Phe	Ala	Thr	Glu
	50					55					60				

Arg	Leu	Leu	Arg	Asp	His	Met	Arg	Asn	His	Val	Asn	His	Tyr	Lys	Cys
65					70					75					80

Pro	Leu	Cys	Asp	Met	Thr	Cys	Pro	Leu	Pro	Ser	Xaa	Leu	Arg	Asn	His
				85					90					95	

Met	Arg	Phe	Arg	His	Ser	Glu	Asp	Arg	Pro	Phe	Lys	Cys	Xaa	Cys	Cys
			100					105					110		

Asp	Tyr	Ser	Cys	Lys	Asn	Leu	Ile	Asp	Leu	Gln	Lys	His	Leu	Asp	Thr
		115					120					125			

His	Ser	Glu	Glu	Pro	Ala	Tyr	Arg	Cys	Asp	Phe	Glu	Asn	Cys	Thr	Ser
	130					135					140				

Val	Xaa	Asp	Pro	Leu	Leu	Tyr	Gln	Val	Pro	Leu	Pro
145					150					155	

&lt;210&gt; 6102

&lt;211&gt; 65

5334

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6102

Phe Cys Leu Leu Ala Gly Glu Glu Ala Met Ser Trp Tyr Ser Gln  
1 5 10 15

Trp Ser Gln Asp Pro Glu Cys Val Ala Lys Pro Tyr Thr Ala Phe His  
20 25 30

Gly Leu Phe Leu Gly Ala Arg Val Gly Gly Asp Met Val Leu Gly Ser  
35 40 45

Asn Leu Pro Cys Asn Arg Trp Arg Ala Val Phe Ser Met Ala Pro Ala  
50 55 60

Val  
65

&lt;210&gt; 6103

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (31)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (49)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6103

Leu Gln Val Thr Leu Ser Ser Trp Pro Xaa Ile Ala Pro Arg Leu Phe  
1 5 10 15

Leu Pro His Trp Gly Gln Ser Phe Pro Trp Thr Lys Glu Arg Xaa Leu  
20 25 30

Gln Pro Phe Phe Lys Ser Leu Gly Pro Gly Pro Trp His Gln His His  
35 40 45

## 5335

Xaa Ser Leu Tyr Ser Ile His Gln Lys His Leu Lys Pro Thr Gln Ile  
 50 55 60

Cys Ser Met Gly Ser Ile His Val  
 65 70

<210> 6104

<211> 137

<212> PRT

<213> Homo sapiens

<400> 6104

Val Tyr Lys Tyr Leu Phe Phe Lys Arg Arg Cys Cys Ala Cys Glu Thr  
 1 5 10 15

Ile Leu Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Leu Val Thr Ala  
 20 25 30

Lys Asp Arg Glu Pro Phe His Phe Gly His Thr Gly Leu Leu Ser Arg  
 35 40 45

Ser His Phe Ser Ser Trp Leu Leu Lys Ile Thr Ala Ser Pro Val Pro  
 50 55 60

Ser Trp Arg Ser Ser Arg Gly Arg Ala Asp Phe Ser Pro Thr Gly Gly  
 65 70 75 80

Thr Met Trp Gly Ser Glu Gly Trp Glu Gly Asp Phe Pro Leu Glu Trp  
 85 90 95

Trp Ser Cys Trp Gly Leu Ile Ser Arg Asp Pro Lys Gly Gly Leu Cys  
 100 105 110

Arg Arg Phe His Ile Gly Gly Ala Leu Ser Leu Ala Ala Val Arg Val  
 115 120 125

Gly Pro Gly Cys Gly Val Gln Thr Ala  
 130 135

<210> 6105

<211> 65

<212> PRT

<213> Homo sapiens

<400> 6105

Gly Asn Ser Arg Val Asp Pro Arg Val Arg Arg Asn Val Thr Arg Val  
 1 5 10 15

5336

Arg Gly Ser Tyr Leu Tyr Ile Gly Phe Pro Ala Glu Asn Arg Pro Leu  
20 25 30

Leu Tyr Arg Phe Trp Val His Asn Leu Ala Leu Leu Val Asn Pro Arg  
35 40 45

Asp Leu Ser Asp Pro Pro Pro Pro Val Phe Phe Leu Phe Leu Phe Leu  
50 55 60

Phe  
65

&lt;210&gt; 6106

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6106

Tyr Tyr Lys Ser Tyr Cys Thr His Phe Val Leu Glu Lys Asn Thr Glu  
1 5 10 15

Ala Val Ala Gln Thr Leu Phe Asn Ile Arg Glu Phe Ile Leu Glu Lys  
20 25 30

Asn Pro Ala Asn Val Met Asn Leu Glu Lys His Phe Phe Ser Lys Thr  
35 40 45

Thr Ala  
50

&lt;210&gt; 6107

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (46)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (47)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6107

## 5337

Val Asp Arg Ala Ile Ser Ile Thr Leu Arg Pro Leu Trp Val Ile Gly  
 1 5 10 15

Ala Asp Lys Val Pro Cys Ile Ala Asp Glu Ile Ser Pro Ser Trp Thr  
 20 25 30

Phe Pro Arg Asn Gly Pro Gly Val Ser Ser Asn Leu Ser Xaa Xaa Ile  
 35 40 45

Thr Cys Leu Glu Ile Thr Leu Glu Tyr Val Ser Tyr Lys Ala Arg Ser  
 50 55 60

His Gly Asn  
 65

<210> 6108

<211> 47

<212> PRT

<213> Homo sapiens

<400> 6108

Thr Arg Glu Arg Arg Gly Gly Asn Met Lys Val Asn Leu Asn Asn Phe  
 1 5 10 15

Cys Asn Thr Ser Tyr Leu Gln Thr Ile Gly Phe Met Leu Leu His Ser  
 20 25 30

Arg Cys Asp Leu Ser Tyr Val Ser Asp Arg Phe Tyr Glu Leu Phe  
 35 40 45

<210> 6109

<211> 122

<212> PRT

<213> Homo sapiens

<400> 6109

Gly Pro Ala Lys Gly Gly Lys Lys Lys Lys Asp Pro Asn Ala Pro Lys  
 1 5 10 15

Arg Pro Pro Ser Gly Phe Phe Leu Phe Cys Ser Glu Phe Arg Pro Lys  
 20 25 30

Ile Lys Ser Thr Asn Pro Gly Ile Ser Ile Gly Asp Val Ala Lys Lys  
 35 40 45

Leu Gly Glu Met Trp Asn Asn Leu Asn Asp Ser Glu Lys Gln Pro Tyr  
 50 55 60

## 5338

Ile Thr Lys Ala Ala Lys Leu Lys Glu Lys Tyr Glu Lys Asp Val Ala  
 65 70 75 80

Asp Tyr Lys Ser Lys Gly Lys Phe Asp Gly Ala Lys Gly Pro Ala Lys  
 85 90 95

Val Ala Arg Lys Lys Val Glu Glu Glu Asp Glu Glu Glu Glu Glu Glu  
 100 105 110

Glu Glu Glu Glu Glu Glu Glu Glu Asp Glu  
 115 120

<210> 6110

<211> 82

<212> PRT

<213> Homo sapiens

<400> 6110

Val Asp Phe Leu Phe Ala Ile Asn Gln Ala Lys Val Asn Ala Ile Ile  
 1 5 10 15

Ser Arg Phe Met Val Asn Lys Phe Glu Val Trp Ile Asn Leu Ser His  
 20 25 30

Ile Phe Tyr Cys Ser Leu Val Lys Lys Gly Thr Arg Lys Lys Ile Ser  
 35 40 45

Ser Ser Leu Val Leu Ser Gln Cys Gly Asp Cys Arg Lys Leu Thr Met  
 50 55 60

Pro Ala Cys Val Asn Val Trp Leu Thr Val Lys Ala Ser Phe Leu Ala  
 65 70 75 80

Ala Cys

<210> 6111

<211> 34

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids



5339

&lt;400&gt; 6111

Met Val Leu Arg Lys Tyr Phe Leu Trp Lys Ile Gly Arg Lys Tyr Phe  
 1 5 10 15

Asn Leu Asn Ile Lys Lys Ile Gly Asn Cys Tyr Phe Gln Gln Gln Ser  
 20 25 30

Pro Xaa

&lt;210&gt; 6112

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6112

Gly Ser Pro Gly Ala His Glu Pro Cys Gln Ala Pro Ala Gly Ser Ser  
 1 5 10 15

Arg His Val Pro Asp Leu Trp Gly Pro Arg Glu Gly Thr Phe Pro Ser  
 20 25 30

Trp Glu Arg Arg Arg Ser Gly Gln Leu Gly Glu Gly Cys Glu His Phe  
 35 40 45

Pro Pro Gly Arg Asp Gln Gly Asp Leu His Ala Leu Arg Arg Ala Trp  
 50 55 60

Lys Gly Ser Glu Lys Pro Ala Asp Arg Pro Cys Pro Ser Ser Arg Asp  
 65 70 75 80

His Leu Met Asn His Val Phe  
 85

&lt;210&gt; 6113

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6113

Gln Asn Leu Pro Leu Thr Arg Arg Arg Pro Thr Gly Ser Cys Val Cys  
 1 5 10 15

Leu Gly Arg Gly Gly Pro Gly Gly Gly Gly Leu Arg Ala Gly Ser Arg  
 20 25 30

His Pro Ala Pro Ala Ala Met His Pro Arg Arg Pro Asp Gly Phe Asp

## 5340

	35		40		45														
Gly	Leu	Gly	Tyr	Arg	Gly	Gly	Ala	Arg	Asp	Glu	Gln	Gly	Phe	Gly	Gly				
	50					55					60								
Ala	Phe	Pro	Ala	Arg	Ser	Phe	Ser	Thr	Gly	Ser	Asp	Leu	Gly	His	Trp				
	65				70					75					80				
Val	Thr	Thr	Pro	Pro	Asp	Ile	Pro	Gly	Ser	Arg	Asn	Leu	His	Trp	Gly				
				85					90					95					
Glu	Lys	Ser	Pro	Pro	Tyr	Gly	Val	Pro	Thr	Thr	Ser	Thr	Pro	Tyr	Glu				
			100					105					110						
Gly	Pro	Thr	Glu	Glu	Pro	Phe	Ser	Ser	Gly	Gly	Gly	Gly	Ser	Val	Gln				
	115						120						125						
Gly	Gln	Ser	Ser	Glu	Gln	Leu	Asn	Arg	Phe	Ala	Gly	Phe	Gly	Ile	Gly				
	130					135					140								
Leu	Ala	Ser	Leu	Phe	Thr	Glu	Asn	Val	Leu	Ala	His	Pro	Cys	Ile	Val				
	145				150					155					160				
Leu	Arg	Arg	Gln	Cys	Gln	Val	Asn	Tyr	His	Ala	Gln	His	Tyr	His	Leu				
				165					170					175					
Thr	Pro	Phe	Thr	Val	Ile	Asn	Ile	Met	Tyr	Ser	Phe	Asn	Lys	Thr	Gln				
			180					185					190						
Gly	Pro	Arg	Ala	Leu	Trp	Lys	Gly	Met	Gly	Ser	Thr	Phe	Ile	Val	Gln				
	195						200					205							
Gly	Val	Thr	Leu	Gly	Ala	Glu	Gly	Ile	Ile	Ser	Glu	Phe	Thr	Pro	Leu				
	210					215					220								
Pro	Arg	Glu	Val	Leu	His	Lys	Trp	Ser	Pro	Lys	Gln	Ile	Gly	Glu	His				
	225				230					235				240					
Leu	Leu	Leu	Lys	Ser	Leu	Asn	Leu	Arg	Gly	Gly	Asn	Ala							
				245					250										

&lt;210&gt; 6114

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (9)

## 5341

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (115)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6114

Ile	Leu	Phe	Cys	Pro	Ala	Ala	Ala	Xaa	Lys	Ala	Ser	His	Pro	Thr	Pro
1				5				10					15		

Arg	Thr	Phe	Leu	Val	Arg	Ser	Gly	Leu	Ala	Trp	Gly	Pro	Pro	Phe	Ser
			20					25					30		

Val	Ser	Leu	Val	Cys	Leu	Tyr	Pro	Ala	Leu	Leu	Ser	Ser	Leu	Cys	Ser
			35				40					45			

Ala	Cys	Leu	Ser	Leu	Phe	Ala	Ser	Pro	Phe	Ser	Leu	Ser	Cys	Arg	Leu
	50					55					60				

Leu	Ser	Leu	Gly	Pro	Pro	Trp	Phe	Cys	Leu	Val	Ser	Leu	Ser	Leu	Leu
65					70					75					80

Ile	Ser	Ser	Leu	Tyr	Ser	Phe	Ser	Arg	Ala	Gly	Pro	Thr	Gly	Arg	Thr
				85					90					95	

Arg	Leu	Ser	Gln	Ile	Asn	Pro	His	Thr	Asn	Lys	Ile	Gln	Asn	Gln	Ile
			100					105					110		

Pro	Leu	Xaa	Thr	Gly	Ala	Gly	Thr	Leu	Arg	Arg	Ser	Arg	Ile	Lys	Leu
		115					120					125			

Phe	Ser	Val	Ser	Glu	Ala	Leu	Leu	Thr	Cys	Val	Cys	Val	Cys	Val	Cys
		130				135					140				

Val	Leu	Gly	Glu	Gly	Asp	Leu	Asp	Cys	Ser	Ile	Arg	Thr	Leu	Ser	Glu
145					150					155					160

Thr	Glu	Gly	Arg	Trp	Glu	Asp	Asp
				165			

<210> 6115

<211> 180

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (140)

## 5342

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (157)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (169)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6115

His	Glu	Val	Glu	Asn	Asn	Thr	Leu	Gly	Ser	Pro	Ala	Ala	Ser	Glu	Leu
1				5					10					15	

Leu	Glu	His	Leu	Lys	Pro	Thr	Tyr	Trp	Phe	Ser	Ala	His	Leu	His	Val
			20					25					30		

Lys	Phe	Ala	Ala	Leu	Met	Gln	His	Gln	Ala	Lys	Asp	Lys	Gly	Gln	Thr
		35					40					45			

Ala	Arg	Ala	Thr	Lys	Phe	Leu	Ala	Leu	Asp	Lys	Cys	Leu	Pro	His	Arg
	50					55					60				

Asp	Phe	Leu	Gln	Ile	Leu	Glu	Ile	Glu	His	Asp	Pro	Ser	Ala	Pro	Asp
65					70					75					80

Tyr	Leu	Glu	Tyr	Asp	Ile	Glu	Trp	Leu	Thr	Ile	Leu	Arg	Ala	Thr	Asp
				85					90					95	

Asp	Leu	Ile	Asn	Val	Thr	Gly	Arg	Leu	Trp	Asn	Met	Pro	Glu	Asn	Asn
			100					105					110		

Gly	Leu	His	Ala	Arg	Trp	Asp	Tyr	Ser	Ala	Thr	Glu	Glu	Gly	Met	Lys
		115					120					125			

Glu	Val	Leu	Glu	Lys	Leu	Asn	His	Asp	Leu	Lys	Xaa	Pro	Cys	Asn	Phe
	130					135					140				

Ser	Val	Thr	Ala	Ala	Cys	Tyr	Asp	Pro	Ser	Lys	Pro	Xaa	Thr	Gln	Met
145					150					155					160

Gln	Leu	Ile	His	Arg	Ile	Asn	Pro	Xaa	Thr	Thr	Glu	Phe	Cys	Ala	Gln
				165					170					175	

Leu	Gly	Ile	Ile
			180

## 5343

&lt;210&gt; 6116

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (31)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6116

Asn	Tyr	Lys	Ile	Cys	Met	Tyr	Leu	Ala	Leu	Asn	His	Asn	Leu	Lys	Tyr
1				5					10					15	

Phe	Met	Asn	Ser	Phe	Thr	Ser	Ile	Asp	Ser	Gln	Asn	Ser	Asn	Xaa	Lys
			20					25					30		

Leu	Ala	Ser	Glu	Pro	Val	Arg	Thr	Pro	Pro	His	Pro	Ser	Ser	Cys	Leu
		35					40					45			

Asp	Leu	Ser	Thr	Ala	Ile	Ile	Leu	Cys	Lys	Ala	Val	Val	Leu	Thr
	50					55					60			

&lt;210&gt; 6117

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (6)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (10)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (60)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (62)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

5344

&lt;221&gt; SITE

&lt;222&gt; (69)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6117

Thr Leu Thr Lys Gly Xaa Lys Ser Trp Xaa Ser Thr Ala Val Thr Thr  
 1 5 10 15

Ala Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Ala  
 20 25 30

Gln Leu Thr Arg Cys Gln Leu Gly Ser Cys Ser Gly Gly Arg Lys Arg  
 35 40 45

Leu Arg Arg Phe Pro Ala Leu Ser Pro Gln Pro Xaa Arg Xaa Ser Gly  
 50 55 60

Ser Gln Asp Val Xaa Phe Asp Asp  
 65 70

&lt;210&gt; 6118

&lt;211&gt; 257

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 6118

Pro Arg Val Arg Ala Phe Ala Gly Val Pro Thr Arg Gly Arg Thr Arg  
 1 5 10 15

Gly Gln Ser Arg Arg Cys Ala Ala Glu Ala Ser Ala Gly Pro Glu Arg  
 20 25 30

Asp Ala Arg Pro Gly Ala Pro Ala Ala Gly Thr Met Gly Ala Ala His  
 35 40 45

Ser Ala Ser Glu Glu Val Arg Glu Leu Glu Gly Lys Thr Gly Phe Ser  
 50 55 60

Ser Asp Gln Ile Glu Gln Leu His Arg Arg Phe Lys Gln Leu Ser Gly  
 65 70 75 80

Asp Gln Pro Thr Ile Arg Lys Glu Asn Phe Asn Asn Val Pro Asp Leu  
 85 90 95

Glu Leu Asn Pro Ile Arg Ser Lys Ile Val Arg Ala Phe Phe Asp Asn  
 100 105 110

Arg Asn Leu Arg Lys Gly Pro Ser Gly Leu Ala Asp Glu Ile Asn Phe  
 115 120 125

## 5345

Glu Asp Phe Leu Thr Ile Met Ser Tyr Phe Arg Pro Ile Asp Thr Thr  
 130 135 140  
 Met Asp Glu Glu Gln Val Glu Leu Ser Arg Lys Glu Lys Leu Arg Phe  
 145 150 155 160  
 Leu Phe His Met Tyr Asp Ser Asp Ser Asp Gly Arg Ile Thr Leu Glu  
 165 170 175  
 Glu Tyr Arg Asn Val Val Glu Glu Leu Leu Ser Gly Asn Pro His Ile  
 180 185 190  
 Glu Lys Glu Ser Ala Arg Ser Ile Ala Asp Gly Ala Met Met Glu Ala  
 195 200 205  
 Ala Ser Val Cys Met Gly Gln Met Glu Pro Asp Gln Val Tyr Glu Gly  
 210 215 220  
 Ile Thr Phe Glu Asp Phe Leu Lys Ile Trp Gln Gly Ile Asp Ile Glu  
 225 230 235 240  
 Thr Lys Met His Val Arg Phe Leu Asn Met Glu Thr Met Ala Leu Cys  
 245 250 255

His

<210> 6119  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

<400> 6119  
 Leu Ser Ser Gly Ala Glu Gly Asp Pro Gly Ser Leu Thr Gly Arg Ala  
 1 5 10 15  
 Phe Phe Phe Thr Thr Thr Trp Ala Glu Val Arg Glu Phe Cys His Thr  
 20 25 30  
 Gly Gly Arg Val Thr His Gln Gly Gly Met Trp Leu Gln Gln Ala Lys  
 35 40 45  
 Gly His Arg Lys Gly Gly Ala Gly Asp Ser Arg Val Ala Ala Thr Leu  
 50 55 60  
 Val Gly Trp Gly Gly Ala Gly Gly Arg Ser Asn Arg Asp Gly Val Gly  
 65 70 75 80

## 5346

Leu Lys Lys Ser Phe Phe Phe Ser Phe Phe Lys Gln Lys Lys  
                             85                            90

<210> 6120

<211> 120

<212> PRT

<213> Homo sapiens

<400> 6120

Arg Tyr Phe Leu Lys Met Ala Lys Ile Leu Thr Thr Pro Lys Phe Ala  
     1                            5                            10                            15

His Ala Phe Arg Asn Leu Thr Phe Glu Gly Tyr Asp Gly Pro Val Thr  
                             20                            25                            30

Leu Asp Asp Trp Gly Asp Val Asp Ser Thr Met Val Leu Leu Tyr Thr  
                             35                            40                            45

Ser Val Asp Thr Lys Lys Tyr Lys Val Leu Leu Thr Tyr Asp Thr His  
                             50                            55                            60

Val Asn Lys Thr Tyr Pro Val Asp Met Ser Pro Thr Phe Thr Trp Lys  
     65                            70                            75                            80

Asn Ser Lys Leu Pro Asn Asp Ile Thr Gly Arg Gly Pro Gln Ile Leu  
                             85                            90                            95

Met Ile Ala Val Phe Thr Leu Thr Gly Ala Val Val Leu Ser Cys Arg  
                             100                            105                            110

Arg Ser Pro Asp Ala Gln Lys Ile  
                             115                            120

<210> 6121

<211> 72

<212> PRT

<213> Homo sapiens

<400> 6121

Arg Pro Glu Gly Ala Gln Leu Cys Pro Gln Gly Lys Leu Lys Ser Pro  
     1                            5                            10                            15

Ala Leu Ser Ala Leu Gly Pro Cys Arg Ala Val Arg Val Glu Leu Pro  
                             20                            25                            30

Pro Gln Thr Leu Arg Ser His Ala Val His Ser Ser Ser Trp Ile Ser  
                             35                            40                            45



## 5347

Leu Arg Thr Phe Val Leu Ala Tyr Leu Asn Asp Leu Ser Thr Glu Thr  
 50 55 60

Pro Gly Cys Leu Pro Leu Pro Leu  
 65 70

<210> 6122

<211> 34

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 6122

Val Leu Xaa Ser Ile Pro Phe Ile Ile Ser Tyr Val Ile Ser Leu Ser  
 1 5 10 15

Phe Leu Val Gly Ser Lys Thr His Xaa Gln Phe Ser Gln Ser Ser Met  
 20 25 30

Asp Ile

<210> 6123

<211> 69

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

5348

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (30)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6123

Ser Ser Phe Pro Gln Pro Pro Xaa His Gly Trp Val Gly Glu Ala Arg  
 1 5 10 15

Arg Asn Xaa Leu Arg Gln Glu Val Ala Ala Ala Gln Val Xaa Leu Leu  
 20 25 30

Ala Ser Glu Pro Thr Glu Val Arg Ser Gly Arg Trp Thr Cys Pro Pro  
 35 40 45

Asn Val Pro Asp Ser Gly Ser Cys Cys His Trp Ile Ser Trp His Gly  
 50 55 60

Arg Gln Lys Glu Arg  
 65

&lt;210&gt; 6124

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (73)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;220&gt;

&lt;221&gt; SITE

&lt;222&gt; (80)

&lt;223&gt; Xaa equals any of the naturally occurring L-amino acids

&lt;400&gt; 6124

Thr Pro Ala Pro Pro Ser Pro Ala Ala Ala Arg Glu Ser Thr Arg Arg  
 1 5 10 15

Val Ala Ile Asn Val Arg Ala Ser Ile Ala Leu Ser Ser Ser Leu Arg  
 20 25 30

Thr Leu Val Leu Pro Arg Leu Thr Pro Thr Ser Pro Gly Pro Arg Gly  
 35 40 45

Trp Gly Asn Leu Ala Val Pro Arg Leu Ser Asn Lys Ala Val Leu Ser  
 50 55 60